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Imagine Cup 2008 Worldwide Finals

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The World's Premier Student Technology Competition  
3-8 JULY 2008 | PARIS • FRANCE



MAIRIE DE PARIS

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Information Sector





*"Imagine a world where technology enables a sustainable environment"*



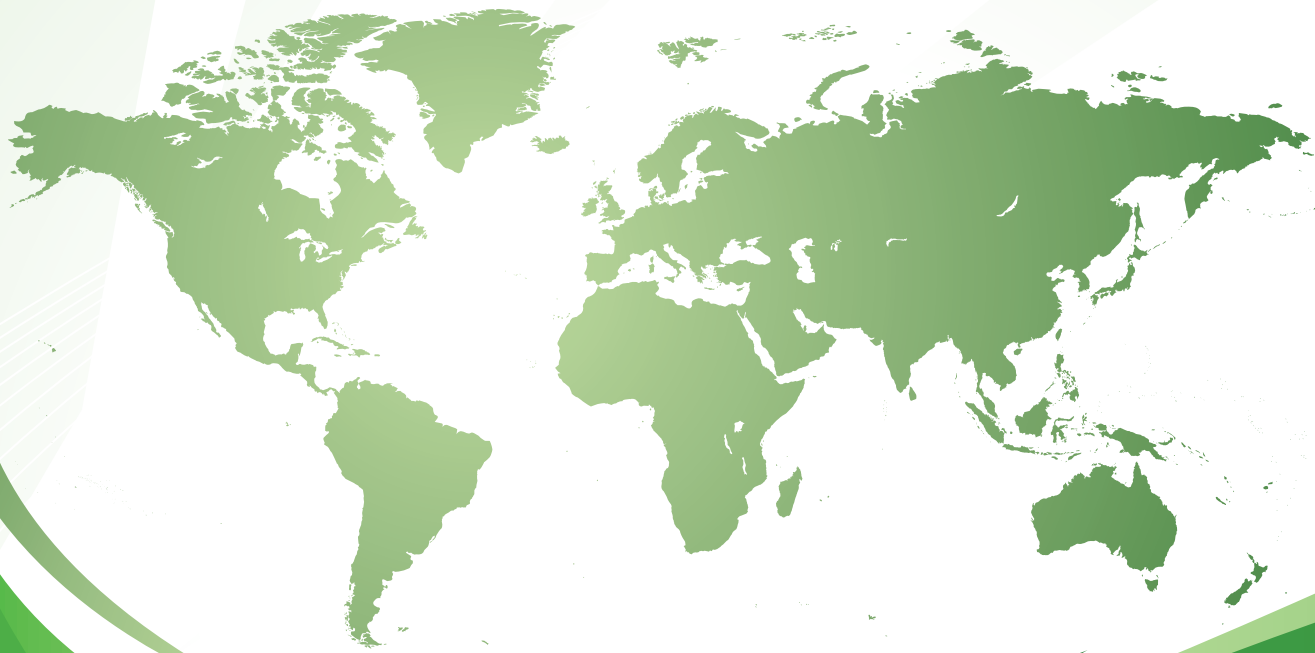
Participating Countries/Regions.....	4-5
Welcome Letters.....	6-15
About the Imagine Cup.....	16-17
2008 Theme: The Environment.....	18-19
About France.....	20-21
Event Schedule and Contact Information.....	22
Software Design.....	24-145
Software Design Interoperability Award.....	146-153
Software Design Windows Live Award.....	154-161
Embedded Development.....	162-193
Game Development.....	194-207
Project Hoshimi.....	208-215
IT Challenge.....	216-223
Algorithm.....	224-231
Photography.....	232-245
Short Film.....	246-259
Interface Design.....	260-273
Interface Design Accessible Technology Award.....	274-277
About the Microsoft Academic Team.....	278
Imagine Cup Innovation Accelerator.....	279
Judges.....	280-281
Sponsors.....	282-289
Imagine Cup 2009 Preview.....	290-291

Algeria  
Argentina  
Armenia  
Australia  
Austria  
Belgium  
Brazil  
Bulgaria  
Canada  
China  
Colombia  
Croatia  
Czech Republic  
Democratic Republic of Congo  
Dominican Republic  
Egypt

Finland  
France  
Germany  
Greece  
Hong Kong SAR  
Hungary  
India  
Indonesia  
Ireland  
Italy  
Japan  
Jordan  
Korea  
Malaysia  
Malta  
Mexico

Morocco  
Netherlands  
New Zealand  
Nigeria  
Norway  
Pakistan  
Philippines  
Poland  
Portugal  
Romania  
Russia  
Saudi Arabia  
Serbia  
Singapore  
Slovakia  
Slovenia

South Africa  
Spain  
Sri Lanka  
Taiwan  
Thailand  
Tunisia  
Turkey  
Uganda  
Ukraine  
United Arab Emirates  
United Kingdom  
United States  
Vietnam



Message from **Bill Gates**



Welcome to the Imagine Cup 2008 finals.

Each year Microsoft sponsors hundreds of events around the globe and participates in hundreds more. But to me, the Imagine Cup is the most exciting of all of the programs we are involved with. The opportunity to bring together tens of thousands of young people from around the world to focus on how we can use software to address important global issues is a real honor for me and for Microsoft.

It's also very inspiring. In recent years, it has been my privilege to meet with many Imagine Cup finalists and see their projects firsthand. It has been great to see the passion and creativity that you bring to your work. I have always been a strong believer in the power of technology to drive progress. Each year I come away from Imagine Cup with a renewed optimism for the future, and for the capacity of people—particularly young people—to see challenges in new ways and deliver innovations that can truly change the world for the better.

Last year, I was deeply impressed by the innovative solutions Imagine Cup participants created to address challenges in education, and the year before that to tackle challenges in healthcare. This year, the focus is on creating technology solutions that help us address difficult environmental challenges. The software that so many of you have developed for this year's Imagine Cup may very well play an important role in reducing demand for energy or improving access to clean air and clean water. And for those of you competing in digital arts and other categories, I hope this year's Imagine Cup has enabled you to hone your skills and refine your ideas by competing with the best and brightest from around the world.

Congratulations on earning a spot in this year's Imagine Cup finals. I believe each one of you has the capacity and the opportunity to play an important role in shaping the future through your talents as business and technology leaders. I look forward to seeing the results of your work, both here at the Imagine Cup and in the future as you move on in your careers.

**Bill Gates**  
Chairman  
Microsoft Corporation

Message from **the Minister for Development of the Digital Economy**



I am very pleased to welcome you to the Worldwide Finals of the 2008 Imagine Cup in France. We feel honored to host so many promising young talents and future creators here in Paris. You have come from the five continents to explore the role digital technology can play in finding new solutions to one of the greatest challenges of our time.

The environment theme of the 2008 Imagine Cup is an opportunity to invent concrete solutions that will contribute to the conservation of the planet, allowing us to face the great ecological challenge of the 21st century.

With "France's Environment Round Table", the year 2008 marked a turning point for environmental issues in France. My Ministry, which manages Strategic Studies, Evaluation of Public Policy and Development of the Digital Economy, is closely involved in these actions.

There is no doubt that digital technologies, including computers, software and networks, will play an increasingly important role in the coming ecological revolution.

Your energy and your imagination, combined with the power of new technologies, represent a huge potential for innovation. Driven by the passion, talent, and creativity that brought you to the Worldwide Finals of the Imagine Cup, you are today in the privileged position of being able to imagine and design applications that will have a direct impact on the world of the future.

Finally, I hope that you will make the most of this unique experience, which goes beyond the competition itself to the benefit of connections and discussions with the other competitors and the pleasure of discovering Paris's cultural wealth.

Good luck in the 2008 Finals!

**Eric Besson**  
Minister for Development of the Digital Economy  
France

\*Grenelle de l'environnement  
<http://www.legrenelle-environnement.fr>



Message from **the Mayor of Paris**



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A warm welcome to all of you!

It is an honor for the City of Paris to host the Worldwide Finals of the 2008 Imagine Cup, a great digital competition that brings together over 400 students from more than 60 countries. All of the young finalists who are here this week have demonstrated their ingenuity and creativity by inventing innovative solutions to protect the planet and reduce pollution and greenhouse gas emissions.

I would like to tell these talented young people that they are the most valuable resources we have today to face the challenges of the new millennium. They are already deploying their skills on a global scale. They have understood that innovation is the driving force of the future and that prosperity is based on knowledge and putting that knowledge to use. I have every reason to believe in the future, because these finalists know that the only real progress is sustainable and because they feel responsible for the world in which they live.

Paris is a pioneer of new technologies. Soon, 80% of the city's buildings will be connected through an optical fiber network. Paris is Europe's leading academic capital with 300,000 students. Paris is a sustainable city that is committed to reducing global warming, with its ambitious "Plan Climat". Paris is investing in the future. The creation of the Paris Agency for Innovation, the Institute of Sustainable Cities, and the development of clusters that bring together university research labs and innovative young start-ups are all proof of the city's vitality.

A fantastic adventure has brought you here. I hope that you will make the most of this week to discover all the beauty and cultural wealth of our city, its diversity, quality of life, heritage, and vitality. I wish you all an excellent finals and an unforgettable stay in Paris.

**Bertrand Delanoë**  
Mayor of Paris



Message from **UNESCO**



UNESCO is pleased to welcome the participants of the Worldwide Finals of Imagine Cup 2008 for the last round of the competition and prize awarding ceremony at its Headquarters in Paris, France.

For UNESCO, with its unique mandate to promote international cooperation in the fields of education, science, culture, communication, and information, Imagine Cup 2008 provides a creative forum that encourages young people to apply their imagination to technology that supports a sustainable environment.

Initiatives like the Imagine Cup have a great potential to introduce new, pioneering solutions to address the challenges of climate change. At the same time, they provide an excellent framework for young technologists to develop their ICT expertise and to encourage them to imagine new economic opportunities by engaging and encouraging them in the pursuit of excellence and innovation in technology.

By hosting the finals of the Imagine Cup at our Paris Headquarters, we again express our support to this initiative by Microsoft, as we did last year for Imagine Cup 2007 in the Republic of Korea. It is a great example of the way through which we implement the strategic partnership agreement with Microsoft that we signed in 2004 to support the use of ICT for sustainable development.

As a member of the Jury for these finals, UNESCO is looking forward to the results of the energy and creativity of the bright young people from around the world that compete for this prestigious award. We invite you to take the opportunity of being at our Headquarters to learn more about our own activities, particularly as regards tackling issues related to the environment.

Welcome to UNESCO!

**Abdul Waheed Khan**  
Assistant Director-General for  
Communication and Information  
UNESCO



With the support of  
**Communication and  
Information Sector**

Message from **S. Somasegar**

The Imagine Cup has come a long way. About 1000 students from 25 countries/regions participated in the first Imagine Cup in 2003. And this year, over 200,000 students from more than 100 countries around the world competed in the Imagine Cup. We are excited to be hosting the 2008 Imagine Cup Worldwide Finals in France, a country with a rich history and culture, and a tradition of innovation. It's truly a privilege to recognize the talents of the world's brightest young students with a passion for using technology and software to solve real-world problems in the field of environmental sustainability. These students have developed a vibrant community built on mutual respect and healthy competition over the past 12 months.

Now in its sixth year, the Imagine Cup continues to challenge students around the globe to imagine a better world empowered by technology and created by their talent and innovation. In 2008, we are challenging the most talented students from all over the world to bring their ideas to life in a multifaceted competition that spans nine categories from Software Design, Game Development, Algorithm, and Short Film to Embedded Development, Photography, IT, Project Hoshimi Programming Battle, and Interface Design.

The finalists in France represent the best and brightest from all over the world and are here for a weeklong final competition that will enable them to experience the world outside of their home countries/regions and interact with their fellow students from all over the globe. The Imagine Cup is about helping our young leaders focus their dreams, ideas, and creative energy into projects that benefit the society of tomorrow.

This year we invite students to "Imagine a world where technology enables a sustainable environment." This theme is increasingly important in our world. There's no question that we all need to work together to reduce greenhouse gasses and use natural resources more efficiently. Software will play a vital role in the innovations that help us achieve new levels of energy efficiency in every aspect of our lives. Software will make our homes and buildings more intelligent, so we use only the energy we need for lighting, heating, and cooling. It will enable businesses to redesign products and processes to use less energy and fewer natural resources. High-performance computing will help researchers understand the effects of climate change and mitigate its impacts.

Our finalists' creativity speaks volumes about the promise of technology to advance environmental sustainability. From creating embedded devices that measure the environmental impact of climate change, to encouraging recycling and community involvement through online social networking Web sites—the solutions the finalists have created showcase the many ways technology can help us meet the challenges of the future creatively. As I reviewed the projects that won our finalists a place in Paris I was impressed by the variety of topics and approaches taken by the students. Some teams address the urgent issue of reducing greenhouse gases. Others provide solutions designed to mitigate

the impact of forest fires, improve energy consumption, and empower scientists with real time data on wildlife. In the new Game Development area, students harnessed the power of XNA technology to create entertaining and educational games that teach players how to manage resources and update urban infrastructures. Our finalists have presented creative approaches that have the capability to benefit us as a global community and inspire hope for the future.

I would like to thank the city of Paris, France for hosting this event. They have been extraordinary hosts, providing us with unmatched support and hospitality. Finally, I look forward to experiencing the creativity and brilliance of our group of worldwide finalists. I am excited to see their passion for innovation, their passion for technology, and their passion for making a difference in peoples' lives and the planet. Our finalists represent the next generation of worldwide business leaders and technology innovators. Their work will inspire us all to see how technology can make a lasting change for the better in how we think, work, and live. Please join me in welcoming the global student finalists of Imagine Cup 2008, and in wishing them the very best in all of their future endeavors.

Sincerely,

**S. Somasegar**  
Senior Vice President, Developer Division  
Microsoft Corporation



Message from **Walid Abu-Hadba**

Welcome Imagine Cup 2008 World Finalists! It is a great honor for Microsoft to host you here in Paris, France, for the Worldwide Finals of Imagine Cup 2008. I hope that you are ready to compete for the title of World Champion in your chosen invitational.

The Imagine Cup demonstrates Microsoft's continued commitment to inspire the next generation of technology leaders to apply their imagination, passion, and creativity to solving real world problems and having a lasting impact on the world.

The mission of the Imagine Cup is to make the world a better place using the power of software. In every category of the Imagine Cup, you have the opportunity to transform the world for the better through technology.

I have already had the chance to review some of your work and it has been inspiring to see how you are using your creativity and knowledge to change the world. Applications range from an urban carpooling network that makes data on trips easily available through a social networking web site, to embedded devices that connect recyclers to each other via instant data, to software that educates young children in core sustainability concepts. One team encourages civic participation through an online interface where citizens can report polluters to governmental officials. An embedded system reduces carbon emissions by enabling plant oil powered engines.

The competition will be tough. By reaching the finals of the world's premier student technology competition, you have already shown yourself to be one of the world's most gifted technology students. To me, you are all already winners and I congratulate you on your remarkable achievements.

Best of luck in the Imagine Cup 2008 Worldwide finals.

**Walid Abu-Hadba**  
 Corporate Vice President  
 Developer & Platform Evangelism Group  
 Microsoft Corporation



Message from **Joe Wilson**

In the course of history very few people rise to do great things. Very few take the chances required to achieve what others have only attempted and very few take their dreams into reality. I have been fortunate enough through the Imagine Cup to see the greatness in our world through the work of students. Every year I see students take on not just technology challenges but real social problems that need our help. You try harder, work longer and do anything it takes to make a difference. This is something that all of us can learn from.

I have had the privilege now for four years to oversee this competition with the help of our remarkable representatives around the world and I must say it is one of my favorite things to be a part of. I have seen the articles and videos that show up on news channels and magazines but more importantly I see the photos and videos that YOU post online. I hope you post thousands of these this year and tell the world what you are doing. These are special things because they represent what you think and how you feel about this experience. They also represent that dreams are real and you can achieve these dreams if you really want them badly enough.

Today we are all connected online and in everyday life and we have a responsibility to make great things happen. The world needs great things to happen. You are already doing this too. You are already making a difference through your actions and your projects and your voices that millions of people are already listening to.

Together you are now among a rare group of students who have made it this far. Together you represent more than half of all the world's languages and cultures. Together you represent the best of what the world has to offer. Separately you have arrived here but only together.....do you have the power to change the world.

Welcome to the Imagine Cup 2008 in Paris. Because of all of you this will be an amazing time and opportunity. At Microsoft we are proud to know and work with all of you.

**Joe Wilson**  
 Sr. Director Academic Initiatives  
 Imagine Cup Fanatic  
 Microsoft Corporation



Message from **Rogerio Panigassi**



Dear Imagine Cup 2008 Finalists,

Welcome to the 2008 Imagine Cup Worldwide Finals. By making it here to the beautiful city of Paris, you have proven that going above and beyond is part of who YOU are. My congratulations to each of you.

I have had the opportunity of participating in the Imagine Cup in many different roles. I was first involved when, as a Microsoft representative for Brazil, I helped to organize the 2004 World Finals in Sao Paulo. Experiencing the energy, creativity, and passion of each student to succeed in changing the world has always made this event an inspiring and moving experience for me.

As the Imagine Cup enters its sixth year, it has become even more special to me. This year, it is my great pleasure to be the Imagine Cup worldwide project owner. I am looking forward to the pleasure of meeting each of you in person, and seeing for myself the creative solutions you've been working on all year.

The scope of the environmental issues the world is facing today means that this year's theme is not just significant for those of us meeting this week in Paris—it is also of vital importance for our descendants. You have undertaken a great task and your presence here demonstrates that you have already shown extraordinary ingenuity in addressing real-life problems using the power of software. The ideas you bring to the Imagine Cup have the potential to be part of the global environment solution we need to build a sustainable future for our planet and for each of us. Regardless of the outcome of this competition, your work is necessary and deeply important and I hope that you will continue the work you have already started this year. The world needs you, and I know that you will meet this challenge.

The possibilities of tomorrow are in your hands. And because of that, I have great hope for the future.

I wish you all a challenging and exciting competition, and of course, the very best of luck to each and every one of you!

**Rogerio Panigassi**  
Imagine Cup Project Lead  
Microsoft Corporation

Message from **the Imagine Cup Team**

Welcome to Paris and the 2008 Imagine Cup Worldwide Finals. Just like you, we've been preparing for this moment all year and we are delighted that we will finally have the chance to meet you in person. We've gotten to know you throughout the year by sharing ideas in the forums, answering your questions about the requirements and deadlines, reading your finalist Web pages and questionnaires, hearing about your local software design finals from your regional Microsoft teams, and reviewing your test results and submissions in earlier rounds. We can't wait to finally meet you face-to-face!

Each one of you richly deserves to be here. Each of you has a unique story to tell of your journey here. Each of you has the capacity to make a unique and wonderful contribution to the world after the finals. We are inspired by your idealism, your dedication, imagination, and the deep commitment that you have shown to helping to protect the beautiful planet that we all share.

We hope that you take the time to introduce yourselves to us in Paris. And we hope that as you focus on competing and giving your best in the next few days, you also take the time to get to know your fellow finalists, to enjoy the beautiful city of Paris, to share ideas, exchange e-mails and phone numbers, and to forge lasting friendships.

The Microsoft Corporate team and the Microsoft France team have been working together to create an unforgettable experience for you. We are looking forward to spending the week with all of you in Paris!

**Good luck!**



**Imagine Cup Corporate Team**

Front row (left to right) : Mary Corrales-Díaz (standing), Lisa Keating, Emanuele Ognissanti, Bruce Curling, Leandro Doeyo, (standing) Rogerio Panigassi, Tim Heikell  
Back row: Lisa Harper, Brian Conte, Monette Johnstone



**Microsoft France Team**

Laurent Ellerbach, Julien Fournier, Marc Jalabert, Vincent Bouatou, Cécile Maurin, Loïc Paitel, Cindy Herranz, Sébastien Imbert, Thomas Lucchini, Christine Kechichian, Bertrand Salord

## About the Imagine Cup

As the world's premier student technology competition, the Imagine Cup is one way Microsoft is encouraging young people to apply their imagination, their passion, and their creativity to technology innovations that can make a difference in the world—today.

Now in its sixth year, the Imagine Cup has grown to become a truly global competition focused on finding solutions to real-world problems. The Imagine Cup has also earned the endorsement of the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

The Imagine Cup competition continues to expand. More than 200,000 students entered the 2008 competition, up from approximately 100,000 students who participated in 2007.

In 2008, the Imagine Cup welcomed a new invitational: Game Development. The Game development competition tests students' creative and technical skills by challenging them to create a game that's not only entertaining but has a social message that addresses the 2008 theme. The Game Development invitational is sponsored by XNA, Xbox and Games for Change.

Three new awards that recognize excellence in specialized areas were also launched in 2008:

- **The Software Design Interoperability Award** recognizes the software solution that best leverages out-of-the-box Microsoft technologies and blends them with other technologies to connect people, data, or diverse systems in a new way. To learn more about the three finalist teams, see page 146.
- **The Software Design Windows Live Award** recognizes the software design solution that showed innovative ways to build rich interactive experiences on the Web using the Windows Live Platform. To learn more about the three finalist teams, see page 154.
- **The Interface Design Accessible Technology Award** recognizes the user interface solution that can be used by everyone, including people with disabilities. To learn more about the winner see page 274.

These competitions join eight other stellar competitions from 2007: Software Design, Embedded Development, Algorithm, IT, Project Hoshimi, Photography, Short Film, and Interface Design.

The Imagine Cup was founded in 2003 and has traveled the world westward from Barcelona Spain to Sao Paulo Brazil, to Yokohama Japan, to New Delhi India, to Seoul South Korea, and finally to Paris France. The "cup" itself, a trophy first awarded in 2003 when Software Design was the only category, has spent time with the Software Design champions in the United States (2003-2004), France (2004-2005), Russia (2005-2006), Italy (2006-2007), and Thailand (2007-2008). This year the cup will travel from Thailand to Paris and will be awarded to the winning Software Design team on July 8.



## History of the Imagine Cup

### 2003—Barcelona, Spain

**Theme:** "Link between people, information, systems, and devices, using Web services and .NET as the springboard."

**Worldwide Competitors:**

- 1,000 students from 25 countries
- 15 finalist teams

### 2004—Sao Paulo, Brazil

**Theme:** "Imagine a world where smart technology makes everyday life easier."

**Worldwide Competitors:**

- 10,000 students from 90 Countries
- 50 finalist teams

### 2005—Yokohama, Japan

**Theme:** "Imagine a world where technology dissolves the boundaries between us."

**Worldwide Competitors:**

- 30,000 registered, 17,000 students competed from 97 countries
- 86 finalist teams

### 2006—Delhi, India

**Theme:** "Imagine a world where technology enables us to live healthier lives."

**Worldwide Competitors:**

- 68,000 registered, 24,000 students competed from 100 countries
- 76 finalist teams

### 2007—Seoul, South Korea

**Theme:** "Imagine a world where technology enables a better education for all."

**Worldwide Competitors:**

- Over 100,000 registered, 59,000 students competed from 126 countries
- 120 finalist teams



## The Environment

Every day our planet is changing and there are signs of need that we must address. Polar bears are drowning. Glaciers are melting. Forests are being cut down. At the same time, there are many signs of hope. People and businesses are recycling. Scientists are researching renewable energy sources including wind and solar power, and cities are taking steps to improve their air and water quality. Artists are inspiring us to take action by shedding light on what's at stake if we fail to act. The world needs solutions, and the good news is that everyone can help.

For some, a sustainable environment means something as simple as breathing fresh air each time they open a window. For others it means making significant changes in key environmental indicators. However we define "sustainability", we know that our world is vast and complex. Scientists are still learning what's at risk and what we can do as a unified planet to address the dangers.

The theme of Imagine Cup 2008, "Imagine a world where technology enables a sustainable environment," is a challenge to top student technologists around the world to actively contribute to the mission of protecting our world for generations to come. The response of students to this year's challenge has been remarkable. In fact, many of our Finalists mention the opportunity to make a contribution to the environment as the key factor that motivated them to join this year's competition, seeing in the Imagine Cup an opportunity to do something concrete about problems that concern them very deeply.

As you browse through the project descriptions and learn about the talented young people profiled in this book, it's impossible not to be optimistic for the future. Our Finalists have demonstrated that technology can empower us with new ways to create global environmental solutions. Together we can find the everyday changes that add up to great progress for our planet.

It is fitting that the 2008 Finals are hosted by France, a nation that is a leader in global efforts to combat climate change. In July 2007, the French government established six working groups known as "Grenelle de l'environnement" to address ways to redefine France's environment policy. The proposed recommendations were then put to public consultation, leading to a set of recommendations released at the end of October 2007. The working groups addressed climate change, biodiversity and natural resources, health and the environment, production and consumption, democracy and governance, and competitiveness and employment. With the implementation of the "Grenelle de l'environnement", 2008 marked a turning point for environmental issues in France.

The city of Paris has also demonstrated its commitment to the environment through innovative urban recycling and public transport programs. One example, the city's communal bicycle program, reduces the number of cars in the city and gives people incentives to choose eco-friendly modes of transport.

All of us on the Imagine Cup 2008 team at Microsoft look forward to another year of thought innovation and leadership from the best and brightest minds in the world. Every year, we are astonished by the resourcefulness and creative thinking students bring to the Imagine Cup competition. We are inspired by the possibilities, and are honored to enlist student technologists across the globe in this mission. Together, we can imagine a world where technology is an ally of the environment, not an adversary.

**IMAGINE**  
*a world where technology enables a  
 sustainable  
 environment*



## Welcome to France

*Bienvenue*, and Welcome to France!

Best known as an historical and cultural capital, the City of Paris is also deeply engaged in the Digital Revolution. Throughout your week in Paris you'll have the opportunity to experience both sides of this magnificent city!

Paris is famous for its sophistication and beauty as well as its long tradition as a center of social culture and art. Parisians call their city "City of Light," and tourists come from around the world to tour the city's impressive array of monuments and museums, savor its cuisine, and relax at its many sidewalk cafes and nightclubs. As you walk the streets of modern Paris, a sense of its rich history is never far away.

Paris was founded towards the end of the 3rd century BC on what is now the Île de la Cité by a tribe of Celtic Gauls known as the Parisii. Centuries of conflict between the Gauls and Romans ended in 52 BC, when Julius Caesar's legions took control of the territory. In 508 AD, after the fall of the Roman Empire, Frankish king Clovis I united Gaul as a kingdom and made Paris his capital, naming it after the original Parisii tribe. Paris prospered during the Middle Ages: In the 12th century, construction began on the cathedral of Notre Dame (work continued for nearly 200 years). The Sorbonne opened its doors in 1253 and the Louvre was built as a riverside fortress around 1200.

After the fall of Rome, a series of royal dynasties ruled much of what would later become France. The French Revolution in 1789 ended the era of monarchy, ushering in decades of political instability. French strength and prosperity grew during the 19th and early 20th centuries but during the two World Wars the country was nearly destroyed. After World War 2, France rebuilt its shattered economy and emerged as a major industrial country.

In modern day Paris, "joie de vivre" is seamlessly integrated with ancient history, technological innovation, and a deep commitment to the environment. You'll see this in the easily accessible parks throughout the city that offer free Wi-Fi Internet access, the use of public biking systems to reduce fuel usage, and the sorting of recyclables throughout the city. France derives a significant amount of its energy from renewable clean energy sources such as wind farms. There's also an extensive network of trains to encourage the use of public transportation.

France has emerged as a leader in the fight against global climate change. On July 1 2008, France assumed the office of presidency for the European Union. During the next six months France will regulate the European Union's discussions on global warming. For the past several months under the "Grenelle de l'Environnement"\* discussions, France has formulated programs and action plans to address this global crisis.

Welcome to Paris. Enjoy your adventure here. Today you have joined the ranks of the great inventors, artists, and scientists who have traveled here over the centuries to share their ideas, imagine new possibilities, and change the world for the better. And now, you too are part of the history of the city of Paris!

\*Note: A "grenelle" is a multi-party debate that reunites representatives of government and organizations (professional associations, non-governmental organizations), with goal of unifying a position on a specific theme. It is similar to a long town hall meeting

## Event Schedule

### Thursday 3 July

Arrivals / Opening Ceremony

The Imagine Cup Opening Ceremony and Reception Dinner will take place at Paris City Hall the evening of July 3. The City Hall, also known as the Hotel de Ville, has been located along the Seine River for more than three centuries. The original Hotel de Ville was established by river merchants who used to meet at the Merchants Trade Guild House, which later became the town council. In the 16th century the building was expanded to accommodate the growing needs of the Parisian people. It was renovated and expanded again in the early 19th century. The first "Hôtel de Ville" came to a tragic end when it burned down at the end of the second empire during the Paris Commune. When the Commune fell, the city held a design competition for a new building, and the architects who won made an identical design to the original. The current Hôtel de Ville was built in 1882.



### Friday 4 July

Competitions Commence

### Saturday 5 July

Competitions Conclude

### Sunday 6 July

City of Paris Cultural Day

### Monday 7 July

Software Design, Embedded Development and Game Development Finalist Presentations  
Digital Theater

### Tuesday 8 July

Students Showcase  
World Festival Awards Ceremony  
Farewell Party

### Wednesday 9 July

Departures

## Contact Information

Your family can call the Novotel Paris Tour Eiffel Hotel and reach you directly, or can leave messages at the hotel reception desk.

### Novotel Paris Tour Eiffel Hotel contact information:

61 quai de Grenelle  
75015 PARIS  
FRANCE  
Tel +33 1 40582000 • Fax +33 1 40582444  
E-mail: H3546-RE4@accor.com

### In an emergency:

**Police:** Dial #17  
**Fire:** Dial #18  
**Basic emergency:** Dial #112

### Imagine Cup Information Desk

From inside the hotel: 82400  
From outside the hotel: 01 40 58 24 00





## Technology Solutions



## Software Design

The only competition that is run locally, the Software Design Invitational invites students around the globe to explore their own creativity by using technology to solve important local or global problems. The Imagine Cup provides a theme, but the competitors provide the genius behind the innovative, dynamic, and powerful software applications. Using Microsoft tools and technology, competitors can unleash their ideas, their curiosities, and their talents towards creating usable software applications. Competitors are asked to demonstrate innovation on the .NET Framework and Windows platform but the possibilities only begin with these requirements. Globally, students in this invitational conceive, test, and build their ideas into applications that can change the world. Many former winners go on to start their own companies, work at major corporations, and even integrate their projects into how their schools approach teaching.

The Imagine Cup Innovation Accelerator, a joint project from Microsoft and BT, is a prize awarded to the best software design teams from the Microsoft Imagine Cup. This special opportunity propels Imagine Cup Software Design champions into the next stage of developing their innovative ideas as a business. Teams selected for the Innovation Accelerator program receive technical support and business coaching to create the must-have technology and communications applications of the future. Over an intensive two-week period, students further develop their designs and viable business plans with close guidance from some of the best minds at Microsoft and BT. To learn more about the Innovation Accelerator see page 279.



Software Design



## Algeria



### Polygeek

#### Team Members

Mohamed Amokrane Chentir  
Safa Tliba  
Souad Ibtissem Hannane

#### Mentor

Rabah Sadoun

### Title of Project PickMeUp

#### Project Overview

Automobiles are one of the most commonly used means of transportation in today's world. Unfortunately car emissions are also one of the greatest sources of CO<sub>2</sub>, a very dangerous greenhouse gas. Our software solution, PickMeUp uses geographic localization systems (GPS) and GIS (Geographic Information Services) to reduce the number of cars on the road by enabling real-time car sharing. PickMeUp enables its users to identify the most efficient transportation option through real-time information on which cars are nearest to their current location. It also identifies cars that are en route to the same or nearby destinations.

You can use PickMeUp in two ways: through a Pocket PC or with just a GSM cell phone. Additional features provided with PickMeUp enable the rider to optimize his or her transportation research to find more accurate results.

Finally, we offer a desktop application as well as a Facebook group to allow users to interact with and connect to their social network.

#### Technology/Software Used

- OS: Windows Vista/ Windows Mobile 6.0, IDE: Visual Studio Team System 2008
- SQL Server 2008 and SQL Server CE
- MapPoint WebServices.
- Windows Live Id SDK
- British Telecom SDK
- Fonix Voice In SE 4.1, Fonix Talk 6.0

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We first heard about the Imagine Cup Software Design competition through the cousin of Safa, who was a Software Design worldwide finalist in 2006. The adventure he had and the experience he got during this competition encouraged us to participate to the Imagine Cup. To us, the Software Design invitational the most exciting competition. You come up with an idea, you think about how to implement it with the available technologies, you conceive it, and finally you sell it! This is the processes that will drive our careers soon. So we chose the Software Design invitational because it's the best opportunity to get the experience we need for a career in business.

#### What has been your favorite part of the Imagine Cup competition thus far?

The regional semi-final at Tizi-Ouzou in Algeria, was the most exciting part of the Imagine Cup so far. We really enjoyed meeting all the teams from different universities around the country and competing against them. Our favorite memory of the semi-final was obviously, the announcement of the team that will represent our country at the worldwide final at Paris. We were so happy to be chosen as the winner, after many months of hard work day and night.

#### How did you come up with your idea?

We started by brainstorming the big issues. We decided to focus on global warming which is the most important problem facing the environment today. Global warming is principally caused by CO<sub>2</sub>, which is primarily emitted by transportation systems. That's why we decided to help reducing the number of cars in circulation by working on a new carpooling concept, which is: real-time carpooling.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We believe that the development of a product is successful only if it reaches the market. For that reason, we really look forward to launching a new business using our project, in Algeria where transportation systems need to be improved. This will also help to develop our local economy. We feel that the Imagine Cup Innovation Accelerator program is the best opportunity that will help us to achieve this goal.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

The worldwide final in France will surely be a great event. We are looking forward to an unforgettable experience. We can't wait to meet new people from different countries and cultures, to exchange ideas with the best students of the world and the valuable professionals in the IT field, and finally to keep in touch with them for future collaboration.

#### Links to more information

<http://polygeek.over-blog.com>





## Argentina | South Cone Region



### Useless

Team Members  
Augusto Chesini  
Ivana Tilca  
Sebastián Miserendino

**Title of Project** Greenformation

#### Project Overview

Our solution enables companies and people to join forces together for a common purpose: a better world for all. Our solution provides all the functionality to improve resource management, achieving important energy saving, and thereby reducing resource contamination. We also hope to create a user community with environmental knowledge, committed to improving our planet.

#### Technology/Software Used

- Microsoft® .NET Framework 3.5
- Visual Studio 2008
- Web Services
- Windows Presentation Foundation
- Microsoft® Silverlight™ 2.0
- Microsoft® Popfly™
- Windows Mobile
- Windows Live
- ASP.NET
- AJAX
- SQL Server 2008

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We believe the Imagine Cup is the most important competition for students. To be part of something like this was a dream for all of us, not only because we will be recognized, but also because we developed our software and if we win, we will be proud of ourselves our entire life.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the entire event was the moment we knew that we were selected to represent our region in France. We have a lot of things to share about the environment and we also know how to help the environment. We just wanted the opportunity and the day Microsoft gave it to us was the best day of the entire competition.

#### How did you come up with your idea?

We are .NET developers, and we use our computers almost 24 hours a day, sometimes we leave our computer on because we are downloading things, but we only need them to be working for an hour or two. We needed something to tell us to turn off our computers, saving electric energy, and that's how it came up.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We hope to meet several potential sponsors in France, and we also hope to meet some partners to begin a new business. We're also looking forward to getting in touch with people from different parts of the world who think like us.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

The Imagine Cup is one of the greatest software contests for students, and this year the finals are taking place in one of the greatest countries in the world. That's a lot of history for an historical moment. There could be no better place than France to start a world revolution to save the planet.

#### Links to more information

Blog: <http://www.ivanatilca.com.ar>

Augusto Chesini

Blog: <http://chesini.blogspot.com>

Sebastian Miserendino

Blog: <http://sebastianmiserendino.spaces.live.com>







## Armenia



### Alpha Sphere

#### Team Members

Alexander Adamyan  
Harutyun Muradyan  
Hayk Mantashyan

#### Mentor

David Alanakyan

### Title of Project World Waste Market

#### Project Overview

One of the most important fields in ecology is the problem of waste management. Every day over a million tons of waste are produced worldwide. There are a lot of recycling technologies, however only a small percentage of waste is recycled or reused. Why do we have this problem? In most cases it's because people don't know what to do with their waste (people are uninformed) or don't care about it (people are unmotivated).

With the help of new technologies it becomes easier to bring to life a new global electronic market for the waste business which will solve this problem.

Our solution would provide anyone with new opportunities to earn money by selling and buying waste. Open for everyone, the market would also connect people around the world with the goal of working together to help the environment. Thus our project also seeks to integrate the larger society (and not only specialized organizations) into the process of waste management.

In addition to selling and buying of waste products, our solution also supports related activities. Waste recyclers can also become members of the market providing their service. Waste transporters can offer transportation of specific waste categories from different locations. Charitable organizations and sponsors can start sponsoring programs in the market, thereby making waste re-use/recycling more exciting.

It is possible to review waste movement and market activity statistics which are also available via a Web Service. Concentrations of different materials in specific types of waste are displayed as charts.

The market also contains a big library of articles related to waste re-use technologies, waste recycling technologies, and world ecological problems, and allows the users themselves to post articles, participate in forums, and communicate with each other.

#### Technology/Software Used

- Microsoft® Visual Studio® 2008 Standard Edition
- C# 3.0
- ASP.NET 3.5
- ASP.NET AJAX
- Microsoft® SQL Server® 2005 Express Edition
- Transact-SQL (Stored Procedures)
- Microsoft® Virtual Earth™ SDK 6.1

- Universal Modeling Language (UML) 2.0
- Web Services Enhancements (WSE) 3.0
- Silverlight

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We were very excited by the possibility of developing a new project from its very beginning, using creative solutions, with the freedom to make our own decisions, and a chance to show our potential to the world.

The Software Design Invitational was most significant to us as we all are software developers and we like teamwork.

Usually one develops something which already has many other implementations or something which someone has asked you to develop. With the Imagine Cup we have an opportunity for innovations; to develop a completely new idea and develop it up to the end. That's what we were looking for and could not find anywhere else.

#### What has been your favorite part of the Imagine Cup competition thus far?

The nights. ☺

We worked hard, sometimes even at night, but now we remember all those nights with smiles and satisfaction.

However, the most exciting part was the local final of the Imagine Cup. It was the place and time to show our solution. It is the first time Armenia has participated in the greatest programming competition of the world and we were trying to do our best. However the whole process of competing at the final was very interesting, as we worked intensively and at the same time could watch the development of each others' ideas and of the whole project.

#### How did you come up with your idea?

The Idea of World Waste Market, as it often happens with ideas, occurred one sunny morning. Our team member Alexander spoke about the Imagine Cup and suggested that it was a great chance to combine our interest in ecology and our skills in programming. We started to discuss possible suggestions from different points of view, criticizing them, comparing with many others. At first all our ideas led to hardware-related solutions, but we did not forget that competition is called "Software Design" and finally we found a solution which fit Imagine Cup requirements best and was perfect from all points of view. In fact the author was Harut.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Yes. After the Imagine Cup finals we are planning to launch the Market on the internet which first of all intends to improve the environment in the entire world.

World Waste Market is very easy for a start-up business as it does not require much investment. For future development and enlargement we have ready plans for the upcoming 2 years.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

Events like this are a great opportunity to communicate with professionals from various parts of the world, establish contacts with ideological partners, and (why not?) find friends. The finals in France are also a great chance to enjoy Paris. But still the greatest expectation, and the experience we're most looking forward to, is winning the Imagine Cup.





## Australia



## SOAK

Team Members  
David Burela  
Dimaz Pramudya  
Ed Hooper  
Long Zheng

**Title of Project** SOAK (Smart Operational Agriculture toolKit)

### Project Overview

SOAK is an integrated software and hardware platform with the aspiration of helping farmers achieve sustainable use of their land. This is achieved through the integrated use of environmental sensing, rich visual front ends to display the information to the farmer, and a subsystem which controls farm equipment such as sprinkler systems.

### Technology/Software Used

- .NET Framework 3.5
- .NET Compact Framework 3.5
- LINQ (Language Integrated Query)
- XML WebService using WCF (Windows Communication Foundation)
- Silverlight 2 Beta 1
- Windows Live Map (Virtual Earth) v6
- Microsoft® Visual Studio® Team System 2008 Team Suite
- British Telecom SDK for .NET v5.2.2
- Mobile Device
- Microsoft SQL Server 2005

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Each of us had been looking for a project to work on that would let us apply all of our university knowledge into good use and see what we could create. The Imagine cup gave us the perfect opportunity to not only extend and challenge ourselves, but also to create something that could truly help people all around the world.

### What has been your favorite part of the Imagine Cup competition thus far?

Working with the people that our system would finally impact has been the greatest part of the competition. It was so rewarding collaborating with each of them and seeing the excitement they showed as the realization set in that SOAK would actually be able to deliver what they required.

### How did you come up with your idea?

We started by trying to define what problem would impact people the most. Water conservation seemed to be a big global problem. We started looking at ways to save water in the home, but after further research we discovered that agricultural use of water is many times that of households.

We spent over 2 months just interviewing ground staff and farm management to discover what sort of features and requirements they would need in an agriculture system. From there the system grew and grew until we came up with the final vision of SOAK.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We are currently talking to many parties that are interested in assisting us to commercialise SOAK. With backing from industry bodies (like the National Party of Australia and the Victorian Farmers Federation), SOAK has a high chance of commercial success. There is a need in the market for a holistic system that can assist farmers in this problem domain.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

Seeing the quality of work the other entrants have produced and also how they decided to uniquely approach the problem. The amount of possible entries is endless, and being able to look at the best entries from around the world will be fantastic.

### Links to more information

Dave's Blog: <http://davidburela.wordpress.com>  
Long's Blog: <http://www.istartedsomething.com>  
Dimaz's Blog: <http://www.d-maz.com>  
Ed's Blog: <http://www.edwardhooper.com>





Austria



## BioMatch

Team Members  
 Alexander Duggleby  
 Christian Liensberger  
 Stefan Braitto  
 Marlies Oeltze

**Title of Project** BioMatch

### Project Overview

It is alarming to see the rate at which the Earth's biodiversity—the rich variety of life on our planet—is disappearing. Human medicines, biomedical research, the emergence and spread of infectious diseases, and the production of food, both on land and in the oceans, depend on biodiversity. Scientists have a hard time combating this problem. The sheer amount of data required to successfully make decisions about species and whether they are endangered or if they can be successfully inhabited in a new location is too much for any one person. BioMatch analyzes the data, uses algorithms to cluster the data, and finds threatening or successful matches between species and between species and habitats. It can predict the best location in a habitat for a species to be introduced to. On an existing habitat it can pinpoint threats for a species so that scientists can act quickly. Introduction of species can be simulated to a degree that fatal errors such as killing local species by introducing a foreign more dominant species are avoided. We have not only created BioMatch with the help of modern technical approaches such as self-organizing maps, but two members of our team covered the biological aspect helping to make sure the system can be used in reality.

### Technology/Software Used

- Microsoft Visual Studio 2008
- Microsoft ASP.NET MVC Framework CTP 3
- Microsoft SQL Server 2005
- Microsoft Sync Framework
- .NET Framework 3.0
- .NET Framework 3.5
- Windows Presentation Foundation
- Windows Communication Foundation

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The Software Design invitational gives us the most freedom to come up with fascinating ideas. We were especially attracted by the opportunity to take a different approach to the competition's theme than just the first most straight-forward answer to creating a sustainable environment. The Software Design invitational gave us the chance not just to make up a pure technical team but also allowed us to reach out to our scientist colleagues from other disciplines to tackle a real problem and find a solution that can really help them. In general the Microsoft Imagine Cup is a perfect stage for us to present our skills, get to know other people, and share ideas - and we hope to have a fun time in Paris.

### What has been your favorite part of the Imagine Cup competition thus far?

Creating the project as a team, coming up with different ideas, learning from each other, and seeing that something you have created actually works for others as well. Presenting our project to a team of professional judges and talking to our competitors has helped us along the way.

### How did you come up with your idea?

The idea was born awhile back when we saw a television program about the introduction of invasive species in Australia that had gone wrong and killed local species. While watching we were working on a similar problem involving data clustering and thought about how we could use the same approach to try to predict if such an introduction could go wrong.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We are currently in contact with the Austrian Biodiversity Society, the agriculture minister, and other scientists that have requested information. We will see how these talks go and what further time would have to be invested to fully complete the solution to satisfy user needs.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

Getting to know all the other teams and sharing ideas and experiences. Competing to the best of our abilities and presenting our idea and solution. And of course having a great time after the competition and enjoying Paris and all the events.

### Links to more information

<http://www.biomatch.at>





## Belgium



### eCAR

Team Members  
Nicolas Remy  
Michaël Hansroul  
Angelo Ciffa

Mentor  
Romio Alfonso

**Title of Project** eCar, the carpool Web site

#### Project Overview

According to the official statistics of the United Nation, CO2 emissions are constantly increasing, causing global warming of the Earth. Everybody is concerned and we would like to help people reduce CO2 emissions by decreasing the fuel consumption of millions of cars all over the world.

We have analyzed and developed an attractive and user-friendly Web site offering a carpooling service.

This cheap service is available to anybody who can access the Internet and who is registered. Two kinds of users can access the Web site: "Poolers," the ones that provide their car, and "Poolees," the ones that request services.

Functionalities have been developed to attract users. We have also added an interactive map which displays the journey and enables users to localize meeting points. Poolers have also the opportunity to print their itinerary or to upload the journey information into their GPS. Poolers can see where they must pick up Poolees on the map.

Personal information of each participant like the avatar, first and last name, or mobile phone number will also be available.

Other functionalities have been added to the Web site: an internal mailbox, a time table, etc.

#### Technology/Software Used

- ASP.NET
- Silverlight
- AJAX
- Windows Communication Foundation
- ESRI ArcGIS 9.2 Web Application Developer framework
- Microsoft® Expression® Blend™ 2.5
- Visual Studio 2008
- SQL Server 2005
- IIS 6.0
- ESRI ArcGIS 9.2 Desktop
- ESRI ArcGIS 9.2 Server

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

The Microsoft Imagine Cup competition is THE place to be when you are a student in IT. We love what we're studying. We are young analyst-developers who want to understand and use the latest technologies. The Imagine Cup and particularly the Software Design category allow us to put into practice what we have learned at school and to discover technologies that are not taught in our school yet. Thanks to this competition we've improved our skills and now feel ready to start our professional life.

The Software Design invitational skills needed matched our strengths.

**What has been your favorite part of the Imagine Cup competition thus far?**

Thanks to this competition, we were able to discover teamwork and to learn new technologies from Microsoft. More than a technical competition, the Imagine Cup is a human experience and we will be very glad to represent Belgium in the world finals.

We also were able to meet some important people and make it an exceptional experience.

**How did you come up with your idea?**

Reducing CO2 emissions is one of the main goals of governments, worldwide environmental associations, and all of us.

As everyone is concerned we decided to develop a solution that would be powerful and accessible to everybody.

At first we searched for what was the main cause of pollution, than we found that it was because of the CO2 emissions. Millions of people have a car. And this was the beginning of eCar...

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

We think that eCar's project is a powerful application to reduce CO2 emissions and that companies, as well as local and international government departments, will be interested in helping us bring the eCar Project to the rest of the world.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

The worldwide finals in France are already a great experience for us, we are all winners.

On the human side, we are looking forward to meeting other winning teams to share our ideas and feelings about technologies we all used for our projects.

On the professional side, we hope to meet great IT companies in order to get advice and information about life after the Imagine Cup 2008. ☺





Brazil



## Ecologix

*Ecologix is also a Finalist for the Interoperability Award. For more details on this Award please see page 146.*

### Team Members

Carlos Eduardo Rodrigues  
Eduardo Sonnino  
Renato Ferreira  
Roberto Sonnino

### Title of Project Ecologger

#### Project Overview

Ecologger is an interactive and extendable decision support system that integrates environmental-related issues data provided by members of all sectors of society in a worldwide community. The data can be used to optimize decision-making on environmental issues. It is a pervasive solution, accessible in several platforms (such as mobile devices, digital TV, and the Web), that increases users' environmental consciousness, stimulating them to actively participate in the process of achieving a sustainable environment.

#### Technology/Software Used

- .NET Framework 3.5
- ASP.NET AJAX
- WCF Web Services
- Silverlight 1.0
- Silverlight 2.0 Beta 1
- Windows Live ID
- Windows Live Alerts
- Windows Live Messenger
- Virtual Earth SDK v6.1
- Windows Presentation Foundation
- .NET Compact Framework 2.0
- Visual Studio 2008
- SQL Server 2005 Express Edition
- Expression Blend 2.5 March 2008 CTP
- Nintendo Wiimote
- Google Maps
- Youtube, MSN Soapbox
- RSS feeds

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We've participated in different categories of the Imagine Cup in previous editions of the competition, and we already knew how important the competition is. Besides, we believe this year's theme is very important, considering our country's role in the global environment. We chose the Software Design Invitational because it's the toughest challenge and it's the invitational that gives the greatest opportunity to innovate and change the world in many different ways.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the Imagine Cup this year has been the ability to connect with other great students from our country, thinking about an important issue, and getting feedback from experienced judges in the Brazilian finals.

#### How did you come up with your idea?

Our idea came from the fact that, to contribute towards the solution of the environment issue, we have to solve many issues that require integrated action, bringing together knowledge from the citizens, NGOs, companies, universities, schools, and governments.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

After the Imagine Cup, we hope we can find means to fund this project and bring it to our reality, always hoping to change the world as a community.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We're most looking forward to meeting great students from everywhere, sharing our ideas, connecting, and competing in the beautiful city of Paris!



## Bulgaria



### Atlas

Team Members  
 Boryana Miloshevska  
 Dobromira Ivanova  
 Martin Damyanov  
 Yordan Pavlov

Mentor  
 Milena Lazarova

**Title of Project** EOS.NET

#### Project Overview

EOS.NET is an extensible software system that uses data from satellites to detect disasters. It supports multiple disaster detection algorithms, but we are most proud of our implementation of contextual fire detection algorithms (based on the specifications that NASA uses). This allows us to be able to process satellite data as soon as it is available and in that way warn about forest fires earlier. We have also implemented a deforestation detection algorithm. Other algorithms can be easily added due to the extensible architecture of EOS.NET and HdfEosNet. HdfEosNet is the first .NET library for reading the HDF-EOS format that NASA uses to store satellite data. And it comes with what we like to call SmartCache to allow even computers with not so many resources to be used to save the world.

HdfEosNet abstracts the complexities of reading satellite data so that new detection algorithms can be easily implemented so that we can detect even more disasters. And when a disaster is detected you get notified by SMS and/or e-mail. Again other notification methods can be added very easily to EOS.NET.

The collected data about disasters is accessible remotely through an ADO.NET Data Service. Another latest Microsoft technology—System.AddIn—is used to allow that easy extensibility of EOS.NET with small pieces of software called add-ins. And finally all of the functionality is exposed by a beautiful, user-friendly UI (User Interface) developed using Windows Presentation Foundation and Silverlight to provide a great user experience so that everybody can help save the world.

#### Technology/Software Used

- Visual Studio 2008
- .NET Framework 3.5
- Silverlight 2.0 Beta 1
- Silverlight 2.0 Beta 1 Tools for Visual Studio 2008
- Windows Presentation Foundation
- LINQ
- SQL Server 2005 Express Edition
- ADO.NET Data Services (former project Astoria)
- ASP.NET 3.5 Extensions
- Windows Live SDK (Virtual Earth)
- System.AddIn Pipeline Builder

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

Each year vast forest areas are lost to wildfires. According to recent research this problem is worsening because of global warming. And it's not just the world's forests that are being destroyed. Entire species are vanishing from the face of the Earth, damaging the entire ecosystem. Another serious problem is deforestation. Deforestation leads to even more fatal consequences for some plant and animal species. In some countries illegal logging accounts for up to 80% of the entire timber industry. In most cases forests are destroyed without any consideration of the effects of such destruction. These effects include but are not limited to:

- erosion
- climate changes
- extinction of various plant and animal species
- landslides

We thought, "This cannot continue anymore!" and started working on EOS.NET.

**What has been your favorite part of the Imagine Cup competition thus far?**

It is difficult to select a single favorite moment because it has all been great journey so far. We can tell for sure that we have changed and have become better developers. And it has been so much fun to overcome difficult problems together. It has been a wonderful moment lasting seven months. If just we could capture that moment...

**How did you come up with your idea?**

We've always wanted to build a software that uses data from satellites (it's so cool). And recently wildfires, deforestation, and other disasters are becoming bigger and bigger problems. So this year's Imagine Cup gave us the perfect opportunity to have fun and at the same time save the world.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

The project is going better than we expected at the beginning and there is quite a chance that it will mature enough to be used in practice and a successful business could grow around it.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

Meeting a lot of interesting people and having lots of fun. ☺

#### Links to more information

<http://eosdotnet.blogspot.com>  
<http://bmiloshevska.blogspot.com>  
<http://yordanpavlov.blogspot.com>





## China



### Unique Studio

*Unique Studio is also a finalist for the Windows Live Award. For more information on this Award please see page 154.*

#### Team Members

Jing Pan  
Yang Liu  
Haojian Jin  
Zhou Yan

#### Title of Project CooTrading

##### Project Overview

Global warming caused by greenhouse gas emission is one of the most important environment issues that people need to solve to make Earth a sustainable environment to live. Although many people know the importance of that, few people know what they can do in their daily life to help protect the environment. In the developing countries, people lack the awareness that they can save the environment in their daily life, and there's much room for promoting effective use of energy and renewable energy, especially in rural areas. CooTrading is a solution to help people's better understanding the greenhouse gas emission they cause in their daily life, and a solution to reduce the greenhouse gas emission by effective use of energy, renewable energy, economic incentive, and community efforts.

##### Technology/Software Used

- Visual Studio 2008
- Microsoft Expression
- Windows Live
- .NET Framework 3.5
- SQL Server 2005
- Silverlight2.0
- ASP.NET
- XML Web Service
- SQL Server Business Intelligence
- Windows Embedded
- Windows Presentation Foundation
- ZigBee 802.15.4

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The Imagine Cup can help us to think of our world in a new vision. The Imagine Cup encourages young people to apply our imagination, our passion, and our creativity to technology innovations that can make a difference in the world – today. Together we can make a difference and have fun during the whole process. We chose the Software Design invitational because we believe that software is changing the world. It's so exciting to use technologies to try to solve problems in the real world.

##### What has been your favorite part of the Imagine Cup competition thus far?

The Imagine Cup is a good experience for us, teaching us how to collaborate with our team members and how to find the best way to solve problems.

The Imagine Cup is such a wonderful platform that gives us opportunities to communicate with other excellent students from different regions. In the Imagine Cup, we can implement our projects with passion and energy, and we all can improve by communicating with each other.

##### How did you come up with your idea?

The time to put global warming solutions into place is now.

Scientists say we need to turn the corner on global warming within 10 years to prevent very dangerous impacts from becoming inevitable. Each year that passes without tackling global warming head-on makes the problem more difficult and expensive to solve.

The cheapest and fastest way to cut global warming pollution is to make things that use electricity – like appliances, industrial equipment and buildings – more energy-efficient. So far, there's much room for improvement, and we must help people to choose energy-efficient electrical appliances and be aware of their contribution to environment.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Before CooTrading was designed, a lot of investigations were made to explore a product which enables a sustainable environment, including requirements analysis, potential customer research, engineering feasibility and cost estimation.

We are not geniuses, but we've learned through the Imagine Cup how to recognize the potential of an idea and we want to go through the steps to make it a reality, get more global points of view about software development, and gain the confidence to try to turn our idea into a business.

##### What are you most looking forward to experiencing at the Worldwide Finals in France?

The Worldwide Finals in France is such a great opportunity for us to think of our world in a new vision. We will meet different students from all over the world with creativity and passion, so we can learn more and improve more.





Colombia | Andean Region



## Green House Team

### Team Members

Jimena Adriana Timaná Peña  
 Germaín Bolaños Vidal  
 Elvis Herley Pérez Hernández  
 Darío Francisco Estupiñán Merino

### Mentor

Carlos Alberto Cobos Lozada

**Title of Project** Green House

### Project Overview

Green House is a Decision Support System for researchers of governmental or non-governmental organizations that carry out strategies for Environmental Protection. Green House enables them to identify patterns and efficient techniques of cultivation of native tree species in danger of extinction. Green House is composed of four components: an OnLine Transaction Processing System (OLTP), a Data Warehouse, an OnLine Analytical Processing (OLAP) tool and an analysis tool based on data mining techniques.

The OLTP checks the steps from when the seed is taken from the tree (recollection) through the production of a seedling (approximately 5 feet high) in good condition to be used in reforestation of microbasins and/or zones of agro-industrial use. In this process, the seed goes through pre-germination, germination and sprouting, and the system allows the (automatic or manual) register of valuable information for later analysis.

The Data Warehouse stores the obtained information in different stages of development, which is used to do the exploratory data analysis by means of an OLAP visualizer. The system is designed to answer many questions, for example: "The product from plot A, with sow type B, in a land type C, subjected to a temperature D, that comes from village Z, generates a seedling of quality X."

Also, with predefined reports, or by user exploration, an OLAP visualizer enables answers to questions about the number of producer trees in particular zones, the number of recollected seeds in the last months, the trees that produce high quality seeds, the months of year when the high quality seeds are gathered, and the transportability of a seedling that comes from the greenhouse from the first moment the seed was collected from the tree.

Finally, the analysis module based on data mining techniques enables fixing seed management protocols to get the best seedlings and reduce seed damage during the process, to deliver a certified seed to the direct beneficiaries of the process – the agricultural farmers, the rural farmers who are in charge of the microbasins, and the agro-industrial enterprises that make sustainable use of the wood, among others.

### Technology/Software Used

- Visual Studio 2008
- Microsoft® SQL Server® 2005 Developer Edition (Database, Analysis Services, Integration Services)
- ASP.NET
- ASP.NET AJAX
- Silverlight
- Enterprise Library 3.1
- Microsoft Expression Web Microsoft® SQL Server® Compact 3.5
- .NET Framework 3.5
- .NET Compact Framework 2.0 SP2
- Dundas Chart Visualizer
- Windows Mobile 5.0

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

What inspired us to enter the competition was the opportunity to participate in the biggest technological competition of the world, and the chance to show our research process and technological development that presents an alternative solution to a real problem of great importance for the planet. The competition theme "Imagine a world where technology enables a sustainable environment" was essential in our decision to participate, because Green House can help to maintain a sustainable environment, from a perspective that begins in solving a local problem, which can be applied to solve a global problem.

The Software Design category was selected because the Systems Engineering Program (Computer Science) from our Institution (Universidad del Cauca) is primarily focused on engineering, design, and software development.

**What has been your favorite part of the Imagine Cup competition thus far?**

There have been several wonderful moments. The first and the most important one was showing and competing in the presence of national and international judges the work we developed. The second was showing people that even in a small city in Colombia (Popayán) we can make very interesting things and create solutions to real problems, with the latest technology from Microsoft. The third was to travel, meet other people from other places with other ideas and project proposals that are extremely interesting. Finally, we have had the opportunity to share our project through various media (Web sites, newspapers, radio and television), which is a fabulous experience.

**How did you come up with your idea?**

Our tutor, a member of the interdisciplinary professional group called "Permanent Seminar about sense of occupational training of Engineers in the University of Cauca," has participated in the development of several very interesting collaborative projects.

One proposal that was born in this group was GreenDSS, a thesis that incorporates the latest technology in Colombian agriculture. That project was directed by our tutor and it was developed by the computer science students Jimena Timaná and René Valencia. Green House is an improvement of GreenDSS, which incorporates new technology and functionality.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

First of all, the group wants the software to be used by the CIAT (International Center for Tropical Agriculture) and the CRC (Regional Corporation of Cauca, Colombia). With the experience obtained in the National and Andean Microsoft competitions, and with these two prestigious, experienced users (CIAT, CRC) in the national and international arena, we will start the publicity and marketing process of the product.

Our enterprise hopes to sell the software product at low cost, and we also hope that the services (training, consultancy, development of new functionality, support) will be the main source of our income. To reach this goal, we are going to take finance, marketing, and business courses, as we are not experts in these subjects.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We hope to win the competition and to show judges and students from different countries that our project is very important to many organizations that want to help the planet. In addition, we want to learn about the innovative ideas and projects being developed in the world and people who have developed them. Finally, we look forward to seeing Paris: a city with history, culture, and prospects for the future.

### Links to more information

For more information about Green House, please visit our Web site:  
<http://spar.unicauca.edu.co/GreenHouse/>







Croatia



## The Wall of Balance

### Team Members

Ivan Maček  
Jure Maleš  
Marko Matijević  
Berislav Tomašić

### Mentor

Ivan Šaškorić

**Title of Project** The Wall of Balance

### Project Overview

A sustainable environment implies a balance. A balance needs to be maintained. Maintaining it means that every action must have an appropriate reaction. Appropriate reaction leaves no space for guesswork. Informed decision making and the choice of appropriate reactions should be supported by the latest achievements in technology.

This is why we decided to create The Wall of Balance—a tool that utilizes these achievements in an effort to provide decision makers with verified information and sound, reliable data when choosing the appropriate reaction. The software is designed to provide instant access to valuable information used in this decision-making process. To do that in a manner that allow users to focus on the problem at hand, rather than the nuts and bolts of a software system, we had to design a whole new interface. Instead of a desk with a monitor you squint at, you use any projectable surface. A clear wall will do just fine. Instead of a keyboard and a mouse, you use your hands or the new pointing device we created for this purpose only: the pen. Multiple users can work simultaneously, making it ideal for teamwork.

Pair that with an advanced gesture-recognition system and the network of trust and you get a sophisticated tool capable of dealing efficiently with the task of maintaining the balance.

### Technology/Software Used

- Visual Studio 2008
- SQL Server 2005
- Windows Server® 2008
- Microsoft Virtual Earth
- Expression Blend 2
- Microsoft® Expression® Media Encoder 2
- Silverlight 2
- 2007 Microsoft® Office System
- .NET Framework 3.5
  - Windows Presentation Foundation
  - Windows Communication Foundation
- CorelDraw X4

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

This year's theme, "Imagine a world where technology enables a sustainable environment," took us back to the cradle of western civilization and the Mediterranean Basin. We were inspired to start the ripple there. Ecological issues that impact the Mediterranean also affect us, so we decided to join forces with specialists fighting these issues, and make technology work for us.

**What has been your favorite part of the Imagine Cup competition thus far?**

This was a great opportunity to see how things work in real life, how to be a good team member, and how to solve concrete problems. We have learned so much from each other and especially from our mentors. We are grateful for the chance to make a difference and use technology in a rewarding and positive way.

**How did you come up with your idea?**

Our quest for a solution began in July of 2007. From the start, we knew that we wanted to utilize cutting-edge technology to create a solution that would really make a difference. We spent a substantial amount of time talking with experts in local institutions. Finally we found our topic expert Vjeran Piršič, president of Eko Kvarner Croatia, who shared with us his vision and expertise and brought the missing link that made this a truly remarkable solution.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

During this project we all had a really good time exploring new ideas, learning new things, and developing new skills. We are pleased to have found a way to do our part in making the world a better place. That's why we'll seize all opportunities to continue this kind of work. Concerning the project, we are already negotiating with several interested parties, and we hope that they will see the true potential of The Wall of Balance.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We are really excited, because this is a great opportunity to compete with the world's finest and brightest young minds. We can't wait to see the innovations and solutions of the other competitors, meet new people from all around the world, and be a part of this great competition.

Of course, having a great time in France is something we are all looking forward to. Paris is a great city and we are all eager to explore the French culture and customs.

See you there!





## Czech Republic



## DIP-Disaster Prevention System

Team Members  
Petr Heinz  
Tomas Kocyan  
Dalibor Janckulik

Mentor  
Jan Martinovic

**Title of Project** Disaster Prevention System

### Project Overview

In today's world, in which expansion of information technologies and its mass usage in various branches is experiencing a huge boom, we have both the resources and technologies to either prevent damage from natural disaster or to minimize the aftereffects.

We can't say that our system can stop a natural disaster. But we know that information provided at right time and the right place can save peoples' property – even their lives!

We can't roll back the crises in Burma or in China, but we are able to minimize the aftereffects in similar situations by using DIP.

Our system is able to find potential hazards and recommend the appropriate solution which could prevent or at least minimize hazards by calculating the similarity of the phenomena, their intensity, and their duration in past disasters.

What is DIP? DIP is a chance for people. It is a chance for life. It is a chance for all of planet Earth.

### Technology/Software Used

- Visual Studio 2008
- Visual Studio Team System 2008
- .NET Framework 3.5
- SQL Server 2005
- ASP.NET
- ASP.NET AJAX
- Microsoft® Expression® Design 2
- Expression Blend 2
- Windows Presentation Foundation
- .NET Compact Framework 3.5
- Web Services

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

The Imagine Cup is one of the biggest competitions for students all over the world, so it is a huge challenge. Victory in the competition is very valuable for everyone.

We attended the Imagine Cup last year but we were in 3rd place in the Czech national final. The inspiration for this year was the opportunity to be better than last year.

**What has been your favorite part of the Imagine Cup competition thus far?**

This year's Czech national final was the most emotional experience for us. When our team was declared the winner we were very happy and it was the best time in this competition thus far.

**How did you come up with your idea?**

We realized there is an absence of any similar kind of system. The increasing number of cases of changing of global life conditions compelled us to make a system, which is able to mitigate these after effects.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

Our work will not be stopped. As we wrote before, DIP is not an experimental system. We are planning to release it side-by-side with the Floreon project which is being developed at our university.

DIP is not a commercial system. It will be open for everyone. Yes, it may even be right for you!

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We are looking forward to meeting other teams from different countries. It will be so exciting to share common knowledge and get to know students from other nations.





## Democratic Republic of Congo | West and Central Africa



### Neuro JJet Team

#### Team Members

Kandala Kibay-Michel Joé  
Kibassa Maliba-Masele Junior  
Lupepele Tshishuka Esaie Gracia  
Loshi Kinende Janny Tcheck

**Title of Project** Performance Talatala

#### Project Overview

The goal of Performance Talata is to calculate environmental performance indicators for a specific location. These indicators are based on the amount and types of wasted collected in one place, and the products (energy, chemical products, gaz, temperature ...) that result from the destruction of these wastes. Input information are meant to be provided by a service (private or public) within the city dedicate to this task.

Performance Talatala can also simulate the evolution of these indicators in the future. Therefore, it could be considered as system to help people in charge of collecting wastes and/or in charge of the waste collection policy for one city to take appropriate decisions and to see how it impacts the environment.

#### Technology/Software Used

- NET Framework 3.5;
- Microsoft Visual Studio 2008 Professional Edition;
- Microsoft SQL Server 2005;

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Last year, Mr. Wemba Opota, a Microsoft employee made two presentations at the University of Kinshasa. The first one was to announce the launch of Office 2007 and Windows Vista, with some very cool demos on the kind of applications that could be developed on this platform. The second one was about Visual Studio 2008. Then he presented the Imagine Cup. At that time we didn't know anything about .NET, but we thought that it was only another language to learn. We decided to try the adventure of the Imagine Cup and to see our standing against other students within Africa and around the world.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite moment has been the presentation of the projects in front of the jury and then the public at the regional final. Despite the stress, this is something that will stay forever in our memory, whatever happens.

#### How did you come up with your idea?

We don't know if it's true, but ever since we were born, we've always heard that Kinshasa, the city where we live, is one of the dirtiest countries in the world. We see lots of papers, plastics bags, cans everywhere. For us, this is the day to day living environment. Changing the world must start by changing things in front of your door. That's why we've tried to provide a tool for people and organizations collecting waste.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

The politicians in Kinshasa are more and more aware of the problem of trash within the city. They've decided to launch a national program to improve the collection and treatment of these wastes. They could benefit from our system in the near future. We're planning to improve our application and to present it to people that would be interested.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

First, we're looking to see what other students around the world are capable of. We know they're certainly far more advanced than we are as they're been participating in the Imagine Cup for years now, but what we will see will help to fuel our imagination and creativity. Also, this is going to be the first time we've ever left Kinshasa. Seeing another capital in another continent will be an amazing experience.

#### Links to more information

The Web site of our university:  
<http://www.unikin.cd/>

The developers community we belong to: AfrikDotNet  
[www.afrikdotnet.org/rdc](http://www.afrikdotnet.org/rdc)

The blog of the person that gave us the will to participate to this competition, Wemba Opota:  
<http://blogs.msdn.com/wemba>





**Dominican Republic** | Central America/  
Caribbean Region



## Environment\_F1

Team Members

Dolores Quiñonez  
Arcadio José Ruiz Peña  
Priapo Nicolas Rodriguez Terrero  
Julio Emilio Ruiz Peña

Mentor

Marcos Miguel Brito Pascal

**Title of Project** SACEMI

### Project Overview

Our solution provides companies with a way to control and manage energy use in moments of inactivity. The solution thereby reduces the electricity bill as well as damage to the environment.

The rising cost of electricity, caused by the record increase of petroleum costs in the last few years, has made it necessary to implement a system for management and control of computers' electricity usage, particularly when the equipment is not being used. By reducing energy consumption, there is an overall reduction of costs.

### Technology/Software Used

- Microsoft® Visual Studio® 2005 Professional Edition
- SQL Server 2005 Developer Edition
- Microsoft® Agent
- .NET Framework 2.0
- XML Web Services
- Database features: Function, Trigger y Store Procedures, View, jobs
- ASP.NET
- Microsoft® Expression® Web
- Business Intelligent (BI)

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

We decided to join when we saw the opportunities of development achieved by the competitors of previous Imagine Cups. We chose this category because it offers us the chance to design a complete and complex system to aid the environment.

**What has been your favorite part of the Imagine Cup competition thus far?**

The Regional competition, because of the pressure and its importance.

**How did you come up with your idea?**

The day after the Microsoft team came to our college (UNAPEC) advertising about the competition we noticed that most of the computers in our workplace were on and we realized that all that wasted energy was leading to an unnecessary cost for the company. So if we could find a way to calculate this amount of wasted energy, we would be helping both the company and the environment.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

The logo and the name will be registered as trademarks soon. We see a high business opportunity in the project. So when it is 100% complete we are going to try to sell it.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We hope to achieve a good position and gain inspiration and experience from the abilities of each of the team members and from the presentations of the rest of the teams. We know this experience will help us grow professionally!



## Egypt



### Creative Mind Team

#### Team Members

Abd Ullah Hazaea Abdullah  
Ahmed Galal Abd El-Naiem  
Mahmoud Hassan Abd El-Aziz  
Ramy Essam Hassan

#### Mentor

Dr. Aliaa Youssif

#### Title of Project Mine Hunter

##### Project Overview

Our home country of Egypt has more land mines than any other nation. Those mines are spread over a land that is very rich in environmental treasures:

- About 4.8 billion oil tanks (13.4 trillion cubic feet of natural gas)
- 350 million meter of important rocks and metals
- 3 million feddans of land able to be vegetated
- Underground water

Landmines set in motion a devastating series of environmental events in the forms of soil degradation, deforestation, and pollution of water resources with heavy metals.

In Egypt, we have many buried treasures, natural resources, and millions of feddans of reclaimable lands that are unusable because of mines. So, we decided to participate in enhancing our beloved country's future and came up with the idea of "Detecting mines in minefields using image processing."

Mine clearing is difficult, time-consuming, and dangerous. A lot of time is lost clearing areas free of mines that were selected just to be on the safe side. There are also the two most important losses: human lives and the environment.

##### Technology/Software Used

- Microsoft C# .NET 2008
- Windows Presentation Foundation 2
- Expression Blend 2.5
- MATLAB 7.3
- ASP.NET 2008 with AJAX
- Microsoft Virtual Earth Live Maps 6.1
- Microsoft ASP.NET Web Service 2008
- Office System 2007

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Our inspiration came from the surrounding environment in Egypt. Since we are all students in the Computer Science department at the faculty of computers and information at Helwan University, Software Design was the most suitable competition for us among all the nine options.

##### What has been your favorite part of the Imagine Cup competition thus far?

Egypt's local finals were the most entertaining part until now, since we had many exciting moments—from the first presentation we made, to the moment of announcing the three teams that would reintroduce their presentations, to the moment when we were announced as the winning team in the local finals. Those moments were really unforgettable; we will remember them until the end of our lives.

##### How did you come up with your idea?

"Detecting mines in minefields using image processing" was inspired by the issues facing us in Egypt. So, we decided to participate in enhancing our beloved country's future. We developed this idea as our graduation project.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We intend to complete and implement our idea of providing all the facilities needed to enhance and speed up the process of clearing landmines.

##### What are you most looking forward to experiencing at the Worldwide Finals in France?

1. Representing our country very well; giving a good picture of Egyptian students and their capabilities.
2. Winning the first place.
3. Gaining experience. That is a very important issue as we are still young students, and these competitions are giving us valuable experience that we can use in our future careers.
4. Enjoying the trip and having a lot of fun in France.

##### Links to more information

<http://minehunter.blogspot.com>

[http://mine\\_hunter@yahoogroups.com](http://mine_hunter@yahoogroups.com)





## Finland



### Perfect Hit

#### Team Members

Anssi Sandelin  
Jani Jaakola  
Samuel Hailemariam

#### Mentor

Kari T. Aaltonen

### Title of Project Affect Your Environment

#### Project Overview

Our team's project is designed to facilitate the process of reaching out to a larger audience and organizing interested individuals to form a society that will work together to solve environmental problems. In an era of information technology and social networking, spreading the word and congregating people is straightforward. In short, we created a social networking application that currently operates in a Microsoft technology ecosystem by taking advantage of a Windows Mobile device and the Web.

Our team's approach is to provide a platform from which a strong community that cares about the environment and wants to affect it positively can be built. By putting forward the notion of affecting the environment, our team envisioned a social interaction in which people can collect visual data about an area and then come together to start to discuss, comment, rate, and locate solutions.

As engineers we have the responsibility to facilitate the positive effects of the Internet and technology for a brighter future and a more stable present. Hence, our mission is to balance the necessity with the possibility. The Internet has changed the way people think and interact with each other. Over the years, it has become a medium creating an opportunity to communicate, make friends, and connect with people of different background and culture. But a strong online community that promotes the participation of every individual in taking care of his/her neighbor failed to exist. We also need to outline a solution that attracts the younger and the less involved part of society. A more intuitive approach is to bring as many people as possible together so that we can all be involved in the quest to improve the environment. Our solution makes the activity of being "involved" available anywhere. It's simple, straightforward, and fun to use.

#### Technology/Software Used

- .NET Framework 3.5
- .NET Compact Framework
- LINQ
- Silverlight 1.1 Alpha
- Virtual Earth Version 6
- ASP.NET AJAX
- Visual Studio 2008 Beta
- Expression Blend December preview

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Our team decided to join the Imagine Cup when Microsoft and EVTEK University of Applied Sciences organized a seminar to introduce us to the possibilities that Microsoft offers to students. It was an interesting event where Jukka Wallasvaara, Enthusiast / Academic Developer Evangelist, urged us to become Microsoft Student Partners and along the way discover how to interact with the rest of the developer community. Meanwhile we started to care more about the environment that surrounds us after we settled to build an application that tries to raise awareness. Our team is made of students who are all majoring in Application Development (Software based on Microsoft technologies), so it was a straightforward decision to join the Software Design competition.

#### What has been your favorite part of the Imagine Cup competition thus far?

Perfect Hit's team members have two nationalities, and our members met on the way to a common purpose: to develop the "next big thing." From the first day this mission has been a challenge, a source of excitement, and a learning path that all of us have gone through together. The opportunity to meet mentor companies, to gather an audience and talk about what we did, and above all to plan and design a system that wins the competition, was a great motivation. However, the main thing for us has always been learning and trying out new methods.

#### How did you come up with your idea?

Our team had developed a similar application that involved most of the components we used for this competition but for a different target. We discussed and concluded with the urgency of raising awareness about the environment and providing a platform that enables a change in opinion in people's minds. Then we noticed that we were talking about a social networking site with functionalities that help users to discuss and share information about their environment. So we thought social networking sites can affect people's opinion and the way things are done, and then agreed it should be a system that promotes positive action to "affect your environment."

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

After we saw the responses from different experts on different fields, we were much more motivated in cultivating our idea to a wider audience and solving the relevant issues pragmatically. It is in our deepest interest to pursue the project and make it available for local use in a short while. We will also try to contact people who can turn the prototype into a real application that will result in bringing awareness about our environment, and slowly start to affect it positively.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

Great ideas, great people, great solutions that will help us work together in the quest to end the environmental crisis! We are also fascinated by the social activities that await us in the beautiful city of Paris. We hope to meet young people who are interested both in technology and the environment, which is a rare but a powerful combination.



## France



### Well K'Home

#### Team Members

Regis Hanol  
Gauthier Chanliau  
Sebastien Warin  
Jean-Noel Gauthier

#### Mentor

Laure Portet

**Title of Project** Smart Cooking

#### Project Overview

Based on RFID technology, Smart Cooking transforms a kitchen into an intelligent room capable of managing food products and their wrappings in an ecological way by avoiding waste and making recycling easier. The kitchen becomes part of sustainable development on a daily basis.

Smart Cooking also includes an interface to order online based on a smart list which adapts to user habits. It also offers local fruits and vegetables in order to limit environmental impact of transport.

Finally, Smart Cooking allows the user to select a delivery time which can then be used to group orders by neighborhood.

#### Technology/Software Used

- Windows Vista
- .NET Framework 3.5 (WPF, WCF, Web Services)
- SQL Server 2005
- Visual Studio 2008 Professional
- Expression Blend 2.0
- Mobile Device (Windows Mobile 6.0)
- TAGSYS RFID SDK

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The Imagine Cup is one of the few competitions that allows students to express their passion and bring them forward as opposed to only focusing on the world of work. We think that it is very stimulating to be competing with others, to reflect on a topic of topicality and a concrete project, to seek and choose new angles of reflection, and to explain the solution to others by presenting our project.

The Software Design category attracted us because it allows a group to work together on a program that solves everyday problems. Moreover, the topic of environmental sustainability was very interesting for us to develop and propose a solution.

#### What has been your favorite part of the Imagine Cup competition thus far?

Being on the podium at the finals in France.

#### How did you come up with your idea?

We tried to identify different problems with the environment. Wasteful food really inspired us because by definition we wanted to create a program that could serve everybody.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

The feedback we receive from the media (journalists, entrepreneurs) at the Imagine Cup finals will allow us to consider a development and commercialization of our project.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We hope that our project will attract the largest number of people, especially the jury, and will be able to win the highest qualification. But we also can't wait to share our solution with other students around the world and see their reflection on the same subject.

We are looking forward to meeting software professionals. The Imagine Cup is a formidable springboard to enter the professional world for students who soon will finish their studies.

#### Links to more information

[www.smartcooking.fr](http://www.smartcooking.fr)





Germany



## Point-Power in Time

Team Members

Daniel Franke  
Jörn Schindler  
Vasilios Filippidis  
Axel Ernst

Mentor

Prof. Dr. Joachim Goll

**Title of Project** Point-Power in Time–A Standby Reducing System

### Project Overview

PoinT is a system that is able to turn off devices in standby mode. The system determines which devices are not needed and switches them off. But unlike in standby mode, our system cuts off the power supply completely, so that the devices don't consume power any more. Once a device is needed again, our system recognizes it and turns it on "in time." All embedded systems are managed by a distributed system.

Our Power in Time system addresses two major topics of our society: protecting our natural resources and saving energy in every possible way, and making energy-saving technology a cost-effective solution for business as well as customers.

### Technology/Software Used

- .NET 2.0
- .NET 2.0 Compact Framework
- ASP.NET AJAX
- Languages: C, C++, and C#
- SOAP
- XML

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The University of Applied Science Esslingen has been taking part in the Software Design competition since 2004. So we were invited by our mentor to form an Imagine Cup team to repeat the success of the earlier years.

### What has been your favorite part of the Imagine Cup competition thus far?

Travelling around Germany during the semifinal and final. We came together with a lot of interesting people and enjoyed a great time.

### How did you come up with your idea?

After weeks of investigating ideas for an interesting project we had about five possibilities. In the end we decided to take the one that was the best fit for the theme.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Because some components in our system can't be manufactured by our team, we have to look for partners. This will take some time. At the moment we can't predict if this will lead to a new business.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to meeting nice people from all around the world in Paris. Now that the national finals are over, we are very happy to have the chance to compete with all of them in an international competition.





Greece



## Team Protasis

Team Member  
Anthony Platanios

**Title of Project** Project Protasis

### Project Overview

First I would like to explain exactly what my project is and then I will talk about how it meets this year's challenge. Project Protasis is an application that makes your home really smart and ecologically concerned. It is divided into a PC application, a sensor network, a mobile phone, and a PDA application, a PC client, a Web server, and a Web page. The PC application uses artificial intelligence, by means of fuzzy logic and a smart algorithm. It receives data from the sensors, processes this data, and sends other data back to the sensors (for example, a command to turn off a light). Through this system, it reduces your home's consumption of electrical energy, water, and oil. Furthermore, it gives you real-time information such as electrical energy consumption in kWh, water consumption, oil consumption, and voltage in graphical format. It also sends data to the online server, which creates statistics related to other users in your category. You can access the data from the Web page. Moreover, it has more features such as remote control over all the devices of your home, either from the computer, the PDA, or the mobile phone—from any place in the world. It also alerts you to abnormal situations, such as high consumption, high/low voltage (it can turn off all the devices in order to protect them), movement on a place where there should not be, etc. It is very easy to set up and afterwards it does not need any human interaction in order to work; that is where artificial intelligence comes into place. It is directly connected to this year's challenge, because it makes your home ecologically concerned and it adjusts differently to each user while it is being used, so it constantly evolves. Project Protasis enables a sustainable environment by reducing the resources consumed by your home in a smart way.

### Technology/Software Used

#### Server:

- IIS 7.0
- Microsoft® SQL Server® 2005 Standard Edition

#### Development Tools:

- Visual Studio 2008 Professional
- Expression Blend
- Expression Blend 2 December preview
- NetBeans IDE Version 6
- Adobe Flash CS3 Professional
- Adobe Premiere Pro CS3

#### Other Technologies:

- .NET Framework 3.5
- Windows CE Mobile 6.0
- Microsoft® Windows® Automotive

- Windows Vista Ultimate
- C#
- Java
- Arduino Programming Language
- Machine Code
- RISC Assembly Language
- XML Web Services
- Microsoft DirectX 10.0

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Last June I read an e-mail about the Microsoft Imagine Cup and I did not pay attention to it, because I thought I was too young to be allowed to compete. Then in September I noticed that I could compete, that I was on the limit for the age. So I registered. For some years now I have been into computer programming and I like it very much and I wanted to compete in a competition where I could create everything I wanted, from a User Interface to Smart Algorithms and Fuzzy Logic, so I chose the Software Design invitational. What inspired me was the fact that I love computer programming and I had never achieved something related to it. This competition was a chance for me not only to achieve something related, but it was also a good addition to my bio for my university application next year. I already knew a lot of things about computer programming, so I thought I could make it. Then I realized how hard it would be, because I was and I am competing against universities. But that was a really good motive, because I wanted to prove that I really know a lot of things about computer programming and I have an imaginative mind. It will also help my dream come true, which is entering the MIT (Massachusetts Institute of Technology) with a scholarship.

### What has been your favorite part of the Imagine Cup competition thus far?

This question is fairly difficult. On the one hand, I learned a lot of new things while developing Protasis. On the other hand, during the announcement of the results I felt so excited that I think that was the best moment so far. I cannot decide between these two. The reward of all my work was great, but as the Greek poet C.P. Cavafy says in his poem "Ithaki," "The journey and not the destination is the worthy part." So I cannot decide between these two. The whole concept of the Imagine Cup is really nice and I feel very happy that I finally took the initiative and competed.

### How did you come up with your idea?

At first I only thought of creating an application that would manage a computer's energy consumption, but I found out that such applications already exist, so I started thinking of something more complicated. I came up with the idea of a smart home, because all the "smart" homes that already exist are not really smart, but just technologically improved homes and they only provide the ability of controlling all the devices of your home remotely. So, I thought of adding artificial intelligence in order for the home to become really smart. Since then I have come up with other improvements and I implemented them.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

I plan to use my project to launch a new business, whatever happens. I plan to do this for many reasons. First of all, I strongly believe in the innovation part of the application and I hope that this can be a commercial success. This is also the feedback I get from others. Furthermore and most important, our environment needs help and since I created something that could help it, why shouldn't I try to make a profit while helping the environment?

### What are you most looking forward to experiencing at the Worldwide Finals in France?

The Worldwide Finals in France will be very competitive; I am aware of this. But since I am representing my country I will do my best in order to achieve something great. There will be very powerful teams, but I am not afraid. I am looking forward to experiencing all aspects of this competition and the feeling of waiting for the decision of the judges to come. Furthermore, I wait impatiently for the moment that I will have to present my project in front of a whole audience; this is scary and at the same time amazing.

### Links to more information

My School: [www.geitonas-school.gr](http://www.geitonas-school.gr)



## Hong Kong



### MEN

Team Members  
 Matthew Kwok  
 Cathy Lau  
 Alisa Hung  
 David Wong

Mentor  
 Mr. Liu Man Lee

### Title of Project Mobile Environment-Monitoring Network

#### Project Overview

There are a lot of problems caused by the greenhouse effect, such as the dramatic changes of the climate. Therefore we have designed a system, which unites the power of people all around the world. Our network can monitor and ease the current situation of the greenhouse effect throughout the world, without affecting the economy of the region.

#### Technology/Software Used

- Microsoft Virtual Earth SDK 6.0
- Windows Presentation Foundation
- Silverlight 1.1
- XML Web Services
- Phidgets21 .NET API (USB Sensing and Control, it controls: RFID Sensor, USB Data Logger)
- Windows Mobile 5.0 SDK R2
- .NET Framework 3.5
- .NET Compact Framework 3.5
- ASP.NET AJAX
- ASP.NET 2.0
- ASP.NET 3.5 Extensions Preview
- SQL Server 2005 Express Edition
- Windows Sidebar Gadgets
- Visual Studio 2008
- Microsoft® Expression® Studio

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Our Earth is now suffering from a serious problem: global warming. As students and citizens, we want to do something to solve the problem and to protect our world.

When we know that there is a competition which is called the Imagine Cup held by Microsoft, our passion, our dreams motivate us to join it!

The Microsoft Imagine Cup provided us with a chance to show our effort to the world and help to unite mankind and encourage everyone to come together and protect our world, our homes, and our dreams!

The use of technology brings us a more comfortable life, but software design changes our lives to

be more wonderful! We have passion, we have dreams and we also have talent in Software Design. Since we don't want to waste our talent and would like to share with people, we choose the Software Design invitational to improve the environment and to unite the world with our effort.

#### What has been your favorite part of the Imagine Cup competition thus far?

Learning is fun! The most challenging part is our favorite part because we learned and gained a lot from it.

Software control was the most challenging. In our system, we use quite a lot of new software from Microsoft, like Virtual Earth, Silverlight, WPF, ASP.NET AJAX, Windows Live ID SDK, etc. As they are new software, we have spent a lot of time researching and learning. Also, we really enjoyed the training lessons which were provided by Microsoft. It helped us to perfect our system.

#### How did you come up with your idea?

The movie "The Day after Tomorrow" showed a horrible phenomenon that global warming brings: dramatic climate changes. When we saw the movie, we all felt sad about the disaster that destroyed human life.

Although we cannot change the plot of the movie, we can change our world if all mankind is united. Then we can save our planet and change our world before it is too late. So we've come up with an idea to help unite people to change the ending of "The Day after Tomorrow."

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We have been discussing our project with the Hong Kong Joint-school Meteorological Association, and they have been planning to implement our system in schools in Hong Kong. Furthermore, we hope that we can gain help from some big companies to implement our system in more places, and set up a larger scaled server in order to act more effectively. When a larger scaled server is set up, more members can be a part of our system, and we can save our earth together. Hence, we could raise people's attention toward the ecology.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

The Worldwide finals in France must be exciting and surprising!

We believe that the competitors in France are outstanding. As the winners of their local finals, these are the ones who truly care for our earth. We hope to exchange our ideas and learn from them, to gain experience.

Last but not least, we would like to promote our MEN system and show our effort to the world. With the use of our MEN system, all of humanity can unite to protect our world together.

#### Links to more information

<http://men.yeelok.com>





Hungary



## DigitalMania

Team Members

Ákos Kapui  
Laszló Zöld  
Bálint Orosz  
Gergely Orosz

Mentor

Éva Dorogi

**Title of Project** Green Watering

### Project Overview

The main goal of our project is to minimize the water used by agricultural and personal watering. Today water is one of the greatest global issues! 1.1 billion people don't have enough access to water! And the water crisis is only growing. We realized that 70% of water is used by agriculture, so we decided to reduce the use of water in this area. We've developed a system with scalable complexity so that both big agricultural farms and households can use it. Our system is extremely easy to install, and with the help of soil moisture monitoring, it's also easy to understand and modify. And by collecting extra weather information from the Internet, we can cut down water use by 15–50%! (This number depends on how advanced the previously used watering system was.)

### Technology/Software Used

- Microprocessor PIK
- Assembler
- Soil Moisture Monitoring
- Visual Studio Team System 2008
- .NET Framework 3.5
- SQL Server 2005
- ASP.NET
- Expression Blend 2
- Windows Presentation Foundation
- .NET Compact Framework 3.5
- Web Services

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

We like the Imagine Cup! :) We like that it gives us inspiration to build great software. We really enjoy challenging the best software designers of the country and the world year-by-year! Without the Imagine Cup, we would make great software, but we wouldn't have the motivation to push ourselves to the very limit and to work together as a TEAM!

**What has been your favorite part of the Imagine Cup competition thus far?**

Teamwork the night before the national final! We were under a lot of stress, but we had great fun putting everything together. And, of course, after the finals—the great celebration! ☺

**How did you come up with your idea?**

We saw an article in the newspaper where it was stated that 1.1 billion people suffer from the absence of water. Afterwards, we saw that a watering system was still watering during a summer storm! We realized right away what a waste of water that was—and how easy it could be to prevent this waste.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

Each of us has his own dream, his own field of specialty. We make quite a good team, and we really enjoy working together. This means we would love to continue with our project after the Imagine Cup. If we can get the right amount of media attention and find some investors, we will definitely continue and try to build a business out of it!

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We would love to present our solution in the "big" final of 6 teams. To show the world what students can do. We are also very excited about seeing the other teams' projects and discovering the personality and cultural backgrounds of the other teams!



India



## Novices@Work

Team Members

Saili Dharia  
Krunal Dedhia  
Paras Doshi  
Veenit Mavani

Mentor

Bhavik Vora

**Title of Project** Kalpvriksha

### Project Overview

For decades, food shortage has been crippling many developing economies. Several reports on this situation have attributed low agro-yield to conventional methods of farming. Kalpvriksha is an attempt to break the conventional approach, which invariably dictates that "all fields are homogenous." This conventional approach leads to wastage of agro-resources and is also harmful to the fertility of land. Kalpvriksha enables site-specific crop management by using wireless sensor networks (WSNs). Site-specific crop management takes into account the in-field variability of the soil characteristics at each site. The collected data from WSNs is used to create a site-specific decision support system (DSS). Such a DSS can assist farmers in using agro-inputs like water and fertilizers optimally. By creating a feedback system, we make it possible to continuously monitor the growth of crops. This is how Kalpvriksha helps in maintaining quality and quantity of the crops produced.

### Technology/Software Used

- Visual Studio 2008
- .NET Framework 3.5
- SQL Server 2005
- Virtual Earth API 6.0
- Wireless Sensor Network using Crossbow MICA2 Motes with MTS 400 sensor board

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Al Gore's *An Inconvenient Truth* moved us from being mere observers to doers. The future is ours. It will shape the way we act. This competition is one way to create change. The Imagine Cup has created a platform for solutions that matter and it has done it at the right time. It has given us an opportunity to come up with a solution that can make a difference. Designing software that can create a sustainable environment is a big challenge, and that's why we took it.

### What has been your favorite part of the Imagine Cup competition thus far?

Winning the India Finals has been the best part.

### How did you come up with your idea?

Our college has been working on WSNs for quite some time. When the theme came up, it immediately struck our minds that WSNs are imperative for most of environment-based solutions. Then, we began our search for problems that pose a threat to the environment. We came across problems like climate change, deforestation, power shortage, pollution, and so on. Later, we read an article on how Indian farmers lose a considerable part of their yield simply because of over and under utilization of agro-resources. This is when we formulated our idea.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Our solution is in a nascent stage. Our goal is to tune it to the different agricultural practices in different countries. Only after adding the required complexities can we think of bringing it to the market.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

The prospect of meeting the teams from all over the world and sharing ideas with them is overwhelming. Apart from that, the fact that we'll be spending a week in one of the most beautiful cities in the world is quite amazing.

### Links to more information

Web site: [www.kalpvriksha.info](http://www.kalpvriksha.info)

Blog: [www.kalpvriksha.info/blog](http://www.kalpvriksha.info/blog)





## Indonesia



### Antarmuka

#### Team Members

Arief Widhiyasa  
Dimas Yusuf Danurwenda  
Ella Madanella Dwi Mustika  
Erga Ghaniya

#### Mentor

Dr. Dwi H. Widyantoro

### Title of Project Butterfly

#### Project Overview

Butterfly is a public reporting, documentation, and publishing system for environmental problems that is to be deployed in a country by the government. Butterfly can receive environmental reports from the society through various input devices, including text messages, phone calls, the Internet, and mobile applications. When Butterfly receives reports, it classifies each report into categories according to the keywords retrieved and prioritizes them according to importance. Afterward, it determines where to send the report according to its location and category and sends the information right away to the responsible authority. After the authority receives a report, they can send a response regarding the problem to Butterfly. All the reports and responses would be published on a Web site, so the society can see the current environmental problem, as well as its solution.

By allowing the society to send and see reports, Butterfly is giving every citizen a chance to contribute to saving the environment. Thus, we can increase society awareness towards the environment. Butterfly also ensures that a complete report of the problem will be sent immediately to the organization that is responsible for handling it. In addition, Butterfly also provides report documentation for the authority, which makes the report handling easier.

Butterfly is the answer for environmental reporting problems. It can prevent any delays in solving environmental problems, as it forwards an environmental problem directly to the responsible authority as soon as the sender sends the report. The responsible authority would then be able to take action towards the problem quickly. When an environmental problem is handled quickly, we can avoid further environmental damage. With less environmental destruction, we are taking one step ahead toward environmental sustainability.

#### Technology/Software Used

##### Deployment Needs

- Windows Vista
- Windows Server 2008
- Windows Mobile 6.0
- Silverlight 1.1
- IIS 7.0
- SQL Server 2008
- .NET Framework 3.5
- .NET Compact Framework

##### Development Needs

- Microsoft® Visual Studio® .NET (C# and ASP.NET)
- Expression Blend 2.0
- Visual Studio Mobile 6.0 SDK
- Microsoft Speech API 5.3
- Virtual Earth SDK 4.0
- British Telecom SDK 5.1.0
- GPS.NET SDK 2.3
- Windows Presentation Foundation

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We were interested in entering the Imagine Cup for several reasons. First, we believed that we could learn and explore new technologies when building this project, thus it could add to our experience. We also wanted to represent Indonesia and win a prize for Indonesia in an international competition. Last but not least, since this year's theme is the environment, we also hope that we can help the world in achieving a sustainable environment through our project. Out of the many competitions available in the Imagine Cup, we choose the Software Design invitational because we think that Software Design is the most challenging competition. It requires you to integrate many aspects, both technical and non-technical, such as software engineering, teamwork, and presentation skills.

#### What has been your favorite part of the Imagine Cup competition thus far?

We enjoyed the process of building our project, especially when we gathered information regarding the environment from the experts, as we do not study the environment as our major. We got new experiences when we visited the Ministry of Environment and environmental NGOs, and also when we interviewed random people in a mall, a traditional market, and a shuttle stop to learn what they think about the environment and our project.

#### How did you come up with your idea?

We actually had several ideas in our mind before we finally chose to develop this one. We had interviews with people from the Ministry of Environment and environmental NGOs, and we came to the conclusion that this was the best idea that we can implement right now. This is also something that our country needs, as the current environmental reporting system has not optimized the use of information technology, causing delayed environmental reports and delaying the problem handling. So, we hope that our project can improve the environmental reporting system in our country.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We are currently in the process of implementing our project with Ministry of Environment, Republic of Indonesia. Since our project can be used by any countries in the world, we welcome any country that is willing to implement our project.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We're looking forward to meeting students from around the world and sharing our experience and thoughts, especially about software and technology.

#### Links to more information

*We don't have a team blog (yet), but we post things regarding our projects in our personal blogs.*

Arief: [blog.clawford.net](http://blog.clawford.net)

Ella: [lalapsambel.wordpress.com](http://lalapsambel.wordpress.com)



## Ireland



### parkIT

#### Team Members

Cristina Maria Luminea  
Marina Andricic  
Paul Cadden  
Tristan Palmer

#### Mentor

John Kelleher

#### Title of Project parkIT

##### Project Overview

Our system is about helping motorists locate available parking in an easy and efficient manner. Dedicated parking cameras analyze parking spaces to determine when they become available (empty). The feed from these cameras is captured and analyzed by our application.

We are developing parkIT primarily from an environmental point of view. People driving around at a slower pace trying to find a suitable location to park add to congestion, which in turn leads to slower traffic. The end result being increased engine burn that adds significantly to carbon emissions.

The potential for this project to benefit the environment is enormous. The system seeks to reduce parking time for motorists, thus reducing engine burn and congestion by getting motorists parked in an efficient manner.

The benefits of a real-time parking information system can be outlined as follows: Reduce traffic congestion by negating the need to make multiple trips around the streets or car parks in an attempt to find parking. Additional benefits:

- Improve time management for the user
- Stress levels reduced
- General improvement of the urban environment
- Potential to aid in the analysis of traffic flow for future planning

##### Technology/Software Used

- Visual Studio 2008
- SQL Server 2008
- Expression Blend
- Windows Presentation Foundation/eXtensible Application Markup Language (XAML)
- Silverlight
- BT Web21C SDK
- C#
- Language Integrated Query (LINQ)

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Our main inspiration to enter this competition was the Imagine Cup theme: "Imagine a world where technology enables a sustainable environment." As environmentalists, this year's Imagine Cup challenge was right up our street. We wanted to take on a project that matters, one that is indeed a challenge but has huge potential to reward us all if conducted properly. The Software Design competition gave us the opportunity to try and make a difference in the surrounding world and, at the same time, experiment with new technologies.

#### What has been your favorite part of the Imagine Cup competition thus far?

We believe this competition is a great challenge for us in terms of technology, communication, working with deadlines and addressing environmental issues. Our favorite part was the opportunity to work with people from different backgrounds and learn about their different cultures. The most interesting part was finding out about the traffic, parking, and environmental problems each country faces. At the same time, the experience we had in the Irish finals is unique. It taught us a lot about interpersonal skills as well as working under pressure and dealing with a tight schedule—things we could not have learned from books.

#### How did you come up with your idea?

The idea for this project came from our mentor, John Kelleher, who said that he'd been thinking of the basic idea after his own frustrations at finding parking spaces in Sligo: "You tend to follow everyone around waiting for a space. And being a geek, I guess I had to figure out a way of solving the problem."

The idea and this problem held an immediate appeal for us and so we set about researching the issue. We found out that people looking for parking are causing congestion that affects the environment. From there on we started to look for ideas on how we could address this problem with technology.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Yes, we fully intend to develop our project into a marketable product. We believe that the system encapsulates a fantastic concept. It uses existing affordable technologies to solve a problem that affects local authorities and individuals alike throughout the world. As the number of cars on roads worldwide increases, the problem becomes ever more pressing every day. Because of this, we feel that our technology has the potential to achieve widespread up-take and therefore achieve significant reduction in carbon emissions globally.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

As a team, we feel very privileged to be representing not only our college Institute of Technology, Sligo, but also our country in this very prestigious worldwide event. We know that the competition includes some very strong international teams; the fun part for us will surely be to swap war stories with them and learn of their road to success. It will be fascinating to witness such diverse cultural backgrounds all united by core technologies. Learning how others interpret the problems and challenges that affect us all reminds us that we all inhabit a shared global village and the resources that go with it.





Italy



## Shining Bits

Team Members  
 Roman Fulin Denis  
 Petrucco Marco  
 Calligaris Andrea  
 De Biasio Mauro

**Title of Project** Vision: The Environmental Sensibilizer

### Project Overview

Vision is an application developed to make people aware about sustainable environment matters, offering a tool that gives them the possibility to interact with other people and their ideas and plunging them into a 3-D world that evolves following the changes made by the community.

The basic idea is to put people who wish to discuss current environmental matters in touch without the restriction of a simple insertion of opinions but offering a new method of interaction with them and with the other users.

Vision is community-based software encouraging the interaction between users (with blogs, forums, or chats), favoring the fruition and the creation of content in a new and creative way, and stimulating the people's curiosity and willingness to socialize.

That curiosity comes from the availability of an innovative tool that gives the possibility to see the user's own ideas: a tri-dimensional scene created from the analysis of these ideas!

### *Why read your ideas when you can see and touch them?*

The range of sensations and motivating forces coming from a virtual environment is absolutely richer than the one coming from a simple textual interaction!

Reading and writing about lakes, mountains, and forests can be interesting, but it's far more interesting to plunge into this world. During a discussion, the software parses the text and visualizes a tri-dimensional environment based on the recognized elements!

We have focused on the educational and cultural growth of the youngest generations in environmental terms because, according to us, the future of the environment is up to them. The flexibility of Vision means it can be used in many different scenarios such as the restructuring and the planning of green areas making use of the community opinions.

### Technology/Software Used

- Expression Blend 1.0
- Microsoft® XNA® Game Studio Express 2.0
- Microsoft Visual C#® 2005 Express Edition
- Microsoft Visual Studio® 2008 Professional Edition
- SQL Server 2005
- .NET Framework 3.5
- XNA Framework 2.0
- Windows Presentation Foundation

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We believe the Imagine Cup is one of the most challenging competitions for students of Computer Science, letting them compete with the best from all over the world, putting no limits to their imagination. With the Imagine Cup, we can free our minds and think about new innovative solutions for important problems of our society; developing a good solution for this contest helps not only us but the whole community. The Software Design category is the most interesting to us because it grants the possibility to compete at a national level, face to face with the other Italian top developers.

### What has been your favorite part of the Imagine Cup competition thus far?

Surely the most interesting part was the Software Design Italian Final. There was a magical atmosphere with a lot of amazing projects and great guys with incredible ideas.

We have also attended the online categories, but the Software Design onsite finals are great every year!

### How did you come up with your idea?

We wanted to show something new that combined all the latest technologies and supported the Internet community to bring a total new experience to the user.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Some companies are interested in our project and, actually, we are thinking of a possible commercial version of Vision.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are expecting a great challenge and the opportunity to meet many interesting people; we have worked hard until now to show a bit of the future with our project, and we hope that everyone will enjoy Vision!





## Japan



### NIS lab

Team Members  
Tomoaki Matsushita  
Hiroki Kato  
Shinji Nakajima  
Shinya Maeyama

Mentor  
Takahiro Koita

#### Title of Project ECOGRID

##### Project Overview

We imagine a sustainable environment where people are connected together so that they can share information with each other and have effects on each other to improve the environment all over the world. ECOGRID is the system that makes the dream come true. It enables you to save electric power consumption while maintaining optimum comfort for each person.

The word ECOGRID is derived from two concepts. The former part of the word ECO comes from the word "ecology" and the latter part of the word GRID comes from the word "grid computing," which can convert an individual's small computing power to one huge power.

The main goal of ECOGRID is to let people discover a new value of life by connecting homes all over the world. In this system, you can personalize your own module to specify how you would like your home appliances to be controlled so that your home can remain comfortable while saving electric power consumption as much as possible. Since these models are accessible through the Internet, you can easily take a look at other homes' modules. You can see which ones are personalized for its residence, and, if you wish, you can share the modules with other homes and connect your home with those homes.

##### Technology/Software Used

- Microsoft Windows Server 2003
- Microsoft SQL Server 2005
- Microsoft Silverlight 1.1
- Microsoft Internet Explorer 7
- Microsoft Windows SDK 6
- Microsoft Virtual Earth SDK
- .NET Framework 3.0/3.5
- Microsoft Visual Studio 2005/2008
- ASP.NET 2.0
- C# 2.0

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We had an opportunity to watch last year's Imagine Cup competition on video. After watching the presentations, we were greatly inspired by the systems the students from other university made. Since then, we got an urge to create dynamic and powerful software that can be used all over the world. We thought it would be a great idea to create a system where technology enables a

sustainable environment by connecting one's home appliances with other ones. Since last year, we have been studying how to control home appliances in our research. And we came up with the idea that it would be beneficial to everyone to implement a sensor in all the kinds of devices at individual homes and connect them with each other. Around the time when we were thinking about applying to this competition, we were studying .NET Framework as well. When we realized the theme of the Imagine Cup exactly matched what we had been studying, we thought this is nothing but the greatest opportunity to participate in the competition to share our ideas of the system we created for world's ecology.

##### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the Imagine Cup is that we have the opportunity to present our system on a big stage. It has been a great honor to learn about other country's systems and communicate with other country's students. We are looking forward to having various experiences in the world league. We think that we have grown up in the short span of time thanks to the Imagine Cup.

##### How did you come up with your idea?

We were researching home electric appliances control before participating in the Imagine Cup. When we heard about the Imagine Cup and its theme, we thought we can apply our current research to a system that offers a sustainable environment. At first, the concept of our system was not concrete and persuasive enough. However, we succeeded in creating a powerful and dynamic system because we discussed it repeatedly with many people. We believe that we could not have done the implementation of our system without those people's support.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

ECOGRID is a system that reduces electronic power consumption produced from houses by promoting people's goodwill. Although we haven't yet thought about using our project to start a new business, we will probably keep making an effort to work out a good way to have ECOGRID used in as many homes as possible so that we can reduce a great deal of power consumption and save the world. Also, we are looking forward to making a move for the contribution to the world ecology in the future by using the experience and the knowledge we gained from the Imagine Cup.

##### What are you most looking forward to experiencing at the Worldwide Finals in France?

This will be our first opportunity to make a presentation outside our home country. So the finals in France will surely give us a valuable experience. We are willing to share our ideas on the system we have developed and also get some insights from many people from all over the world to improve the system in our future work.

##### Links to more information

[w3.doshisha.ac.jp/](http://w3.doshisha.ac.jp/)







## Jordan | East Mediterranean Region



### PSUT Jordan

Team Member  
Hazim Fayyad

Mentor  
Dr. Ashraf Ahmad

**Title of Project** ISEVA (Intelligent Stack Emission Video Analysis)

#### Project Overview

ISEVA software introduces a new affordable technique for the monitoring of stack emissions from various sources at a distance. Factories have restrictions on the monitoring of stack emissions, and current techniques require that the monitoring person needs to be close to the emission source. ISEVA will be applicable from all aspects. It does not require deep knowledge in emission effects and monitoring; anyone can use it. We can monitor emissions from a distance, and it does not require complex hardware. Any interested parties can monitor factories and report pollution. Factories and other emission sources can use it to monitor their pollution and improve their burning process, which will increase their profit at the same time.

#### Technology/Software Used

- C#
- AForge.NET library
- SQL Server 2005 for Knowledge Base
- Multi threading
- Parallel processing to increase computing efficiency

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

As a big fan of all Microsoft products, I want to be involved with them in any way I can, so I thought that winning one of their competitions was a great start.

#### What has been your favorite part of the Imagine Cup competition thus far?

I am a competitive person by nature, so the best part was the strong competition.

#### How did you come up with your idea?

First, I started the project with motion detection software, but when the motion detection was finished, I started to look for a new application for motion or image processing. Because of the theme of the Imagine Cup and the fact that I have to do a graduation project for the university, I wanted to participate in the Imagine Cup. I qualified for Round 2 in the Algorithm invitational, but I had no time for the Round 2 entry, so I decided to enter the software competition. My mentor, Dr. Ashraf, suggested that I use motion detection in a software program for monitoring fires, but we finally decided to go deeper into the fires and burning process effect on the environment, so we went with ISEVA.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

I don't have a clear idea yet, but I am thinking about getting a Masters degree in Computer Science, and if the software proved its efficiency, starting a new business or selling it to an interested company.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

To meet the finalists from all around the world, getting introduced to the new projects ideas, and, for sure, meeting Mr. Bill Gates if he is there, and finally winning the Software Design competition.





Korea



## Tree Talk

Team Member  
Han-Wook Lee  
Dong-Sub Lee  
Man-Suk Oh

Mentor  
Hyung-Jun Kim  
*Samsung Electronics*

**Title of Project** Tree Talk

### Project Overview

Tree Talk is aimed toward providing a new method of communication between trees and humans by understanding the 'natural signal' emitted from trees. Through statistical analysis and pattern recognition, we provided interactive communication between people and the target trees. We can detect the tree's pain, whether it's thirsty, and its happiness through this communication to make it possible to help protect the tree's health and sustain our green environment.

### Technology/Software Used

- C#
- Windows Communication Foundation (WCF)
- Virtual Earth
- Generic Pattern Recognition
- Microcontroller Programming
- Sensor Network

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We tried out for the Imagine Cup because it is one of the greatest software competitions hosted by the most influential IT company in the world. With the same reason, we thought that the Software Design category is the main challenge of the Imagine Cup, so we wanted to compete against the best students in the world and to prove ourselves as world class software developers through the toughest competition out there.

### What has been your favorite part of the Imagine Cup competition thus far?

The point of the competition is not only to win, but also to learn. We learned many things during our team project. Also, the competition with other great teams helped us improve ourselves and our project to greater degrees.

### How did you come up with your idea?

After agreeing upon the fact that trees and woods are essential to our coexistence with nature, we took the approach of trying to interact with trees by treating them as more than just plants. Our goal is to propose a new method of communication between humans and trees and to protect trees from the harm inflicted by humans.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We want to improve our solution through a Microsoft internship and technical and business training programs if we have the chance. It will be so great if we can make our solution available for public usage to sustain our environment.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

We look forward to meeting other teams from all over the world in the finals. We are curious about what other ideas students from all over the world had come up with, with the same topic of preserving with environment. We are also excited to meet so many students from different countries because we can learn from different cultures and experiences and we can have many friends in many countries.





## Malaysia



### COSMIC

#### Team Members

Jasy Liew Suet Yan  
Loo Wan Koe  
Matthew Phiong Yoon Kheong  
Ooi Keng Siang

#### Mentor

Mohd Azam Osman

### Title of Project Virtual Paper

#### Project Overview

Imagine a paperless environment where technology can be used to replace most written and sketching functions of conventional paper. In our technology-based era, paper is still in demand and is widely used in every nook and cranny of the world. This is bad news for the declining number of trees around the world that are so important to purifying the air we breathe. Introducing our new brainchild, Virtual Paper, breakthrough software developed to substitute all core functions of the paper without the need to cut down any trees. Visualize yourself carrying an electronic device (computer), which you can use to sketch notes, write memo, draft reports, solve mathematical problems automatically, draw a mind map, save all your work into computer memory, and later access your work again for viewing or editing purposes without looking for papers high and low.

On the front-end, Virtual Paper is designed to allow users to write and sketch freely using an input device (stylus and touch screen/light pen/digital pen) as well as automatically erase unwanted elements on a multiple-page workspace. On the back-end, the handwriting recognition and conversion mechanism can convert all types of handwriting into computerized format, which then can be exported into multiple formats for further processing. Virtual Paper not only acts as the conventional paper, but we have also injected a certain level of intelligence to solve mathematical problems and create dynamic form templates.

In a nutshell, Virtual Paper diminishes the need for paper consumption, thus saving trees as well as time and energy looking for papers. Virtual Paper is definitely an intelligent and appealing technology aimed to create a sustainable environment for people from all walks of life.

#### Technology/Software Used

- Visual Studio 2008 Professional
- .NET Framework 3.5
- Windows Presentation Foundation
- Microsoft Speech Server
- ASP.NET
- SQL Server
- Windows Live ID

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Driven by passion and a golden opportunity to make a difference in the world through this prestigious competition, we were definitely inspired by this year's theme to help create a sustainable environment and explore the state-of-the-art technologies by Microsoft. As budding and creative future software engineers, we believed that the Imagine Cup Software Design competition provides us with great potential to make our dreams and visions come to live. Besides, the catch to demonstrate Virtual Paper in the City of Lights is no doubt exciting and indeed an adventure of a lifetime!

#### What has been your favorite part of the Imagine Cup competition thus far?

The fun, the thrill, and Paris! Our favorite part of the Imagine Cup competition was the freedom to think out of the box in coming up with our "killer app." The chance to meet people from all walks of life and share ideas was indeed a humbling experience. Best of all, the entire team worked closely together, laughing during good times and cheering each other up during challenging parts of the competition while trying to reach great heights. Now, the thought of representing our beloved country, Malaysia, in this intriguing international event wakes us up with anticipation every morning.

#### How did you come up with your idea?

Jasy was drafting out her assignment on recycled paper when an advertisement featuring a massive paper dumpsite caught her attention. She was struck with a brilliant idea to virtualize the core functions of generic papers in attempt to crystallize the concept of a paperless society. After a series of brainstorming among the team members and informal interviews with our peers, we were truly committed in creating an intelligent Virtual Paper to subsequently substitute generic papers. It was amazing how four brains combined together with a great support system managed to come out with the craziest ideas for Virtual Paper.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We will definitely not stop here! Equipped with an innovative product, we plan to work with relevant parties to deploy our solution to the masses. Our watchful eyes will be on the lookout for potential investors and funds to launch Virtual Paper to our target markets. In fact, we hope to impress the world and especially Microsoft to work with us in upgrading Journal and Microsoft Office OneNote® with Virtual Paper to revitalize the sales of Tablet PCs.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We look forward to meeting people coming from 173 different countries and to demonstrating Virtual Paper with gusto in this prestigious competition. The exposure and experience to different cultures, languages, and food is a much-awaited adventure. Also, standing on the highest level of the famous Eiffel Tower looking over the Seine River is a dream come true for all of us. Team COSMIC is indeed proud to represent our university (University Science of Malaysia) and Malaysia in the Microsoft Imagine Cup Software Design competition to help create a sustainable environment.

#### Links to more information

USM School of Computer Sciences Web site: [www.cs.usm.my](http://www.cs.usm.my)





Malta



## De Bugs

Team Members  
 Mark Cassar  
 Karl Cassar  
 Reuben Hayman  
 Mario Gauci

Mentor  
 Dr. John Abela

**Title of Project** ANTS Car Pooling

### Project Overview

ANTS Car Pooling is a car pooling system that aims to reduce the amount of cars on the streets. Most of the cars on the road do not have any passengers at all. Several cars might be going to the same destination at the same time with empty seating capacity. By grouping passengers in cars together, one can drastically reduce the amount of cars on the streets. By even placing just one passenger in every empty car, the cars on the street would be reduced by half. Imagine the drastic reduction of cars on the road if more passengers are grouped together.

Motor vehicles are the world's main reason for today's air pollution. Apart from air pollution, the excessive amount of motor vehicles on the roads leads to noise and visual pollution. Also, fewer cars on the road would lead to arriving to your destination faster and more safely!

By registering with our system, car owners can easily pick up other passengers who might be travelling to their same destination by receiving notifications from our system. Picking up other passengers who are travelling to your same destination will cost you nothing, but it could mean one less car on the road. By offering lifts to other passengers, car drivers will earn carbon points, which could then be redeemed in exchange for free electricity and free fuel.

On the other hand, passengers who register with our Web site can book a voyage request and travel to a destination without having to use their vehicle.

Apart from reducing personal vehicles from the streets, our system will also be able to eliminate or reduce the need of public transport since transport to individual people can be provided using normal personal vehicles that are on the road. By developing such a system, we are using technology to promote a better sustainable environment by reducing the amount of cars on our streets thus reducing the amount of air pollution, noise pollution, and visual pollution.

### Technology/Software Used

- SQL Server 2005 Express Edition
- .NET Framework 3.5
- ASP.NET
- Visual Studio Team System 2008
- Windows Communication Foundation
- Adobe Flash 8 and ActionScript 2.0
- HTML and JavaScript

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

We are currently reading a Bachelor of Science Information Technology (Hons) degree at the University of Malta and every year, third-year students can choose the Imagine Cup as one of their group assigned practical tasks (APT). The Imagine Cup is a prestigious technology competition and teams from all over the world showcase their talents in this completion. We were up to the challenge and decided to form a team to give it a try.

Software design incorporates various aspects in computing and that is the main reason we chose this area. By competing in this invitational, we can focus on both the user interface as well as the functionality of the software.

**What has been your favorite part of the Imagine Cup competition thus far?**

Our favorite part was surely in the end when one starts to see things work. Initially, a lot of ideas come to mind about what we can include in the system. Having all parts implemented and integrated together is the most satisfying part of the competition.

**How did you come up with your idea?**

We came up with this idea with the help of our mentor, Dr. John Abela, and by brain storming together. The great amount of cars on the roads is a big problem, especially in Malta. Our idea was to try and reduce the amount of cars in our streets by filling empty spaces in cars by grouping cars together.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

Our solution is greatly relevant to our country since Malta, although being a small country, has a very high population density which leads to more cars on the streets. Trying to reduce the amount of cars on our streets will greatly help our environment and reduce traffic.

It would be a very interesting idea to obtain financial help from any interested parties and actually launch the project on a national scale. We greatly believe in our project and, if well implemented, it could be a great success.

After the Imagine Cup finals, we plan on continuing to work on various projects we have for clients. CasaSoft is our organization and we aim to deliver high quality Web sites, software and rich Internet applications on a freelance basis.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We are looking forward to seeing other teams' work and to meeting other competitors from all over the world. Having different teams from all over the world will lead to various different ideas.

### Links to more information

antscarpooling.com: ANTS Car Pooling is the Web site of our project. One can take a look at the Web site, register, and download the applications used throughout our simulation.

casasoft.com.mt: CasaSoft is our organization by which we aim to deliver high quality Web sites, software, rich Internet applications, e-commerce, print design, domain name services, and hosting services.





## Mexico



### Chicos Karel

#### Team Members

Félix Rafael Horta Cuadrilla  
Rodrigo Rubén Santiago Nieves  
Enrique Lira Vargas  
Fernando Aguilar Reyes

#### Mentor

Gabriel Ibarra Romero

**Title of Project** Pepenator

#### Project Overview

Pepenator is a Web system that motivates people who live in developing countries to recycle by giving them electronic points determined by the amount of recyclable garbage delivered. Those points can be converted into products given out by our sponsors. For example, you register your garbage into the system, and then a garbage picker (let's call him "Pepenator") checks all the garbage that he can collect in your neighborhood using a cell phone with an Internet connection. When Pepenator has marked the garbage, he goes to your home, picks it up, and takes it to a recycling area. This is the moment when the points are added to your Pepenator account. You can redeem your points using a plastic card (that is sent to your home), with our sponsors.

#### Technology/Software Used

- Visual Studio 2005
- SQL Server 2005
- ASP.NET 2005
- Web services
- Web pages for cell phones
- Barcode lector

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The programming contest has been an important part of our lives, because we have participated in many other competitions (like the IOI and the ACM). In fact, we met each other at a programming contest. We entered the Imagine Cup so that we could compete one more time as a team, and we choose the Software Design invitational because we are convinced that we will develop systems for the rest of our lives, and we want to begin doing this work in this amazing competition.

#### What has been your favorite part of the Imagine Cup competition thus far?

The local finals in Mexico were very intense! We didn't know who was going to win because all the teams had incredible projects. The experience we gained meeting with people from all over the country at the at the Microsoft Mexico facilities was wonderful.

#### How did you come up with your idea?

We wanted to help in the area of ecology, and one of the problems that we have in the center of one of the biggest cities in the world is taking care of garbage. So, we thought that we could help our environment by encouraging recycling. How to do this? One of our teammates proposed that we could give something to the people, maybe money or something like that to encourage participation. That moment was when we decided to give points to people that could be redeemed for products, and that was how Pepenator was born.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

The most important thing is to finish our studies before we begin working. In parallel we want to make this project as real as we can by getting support from Microsoft or another company that wants to help us with our idea.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

To win is important, but more important is to meet other people, to share our ideas and knowledge with the best developers around the world, to compete in an international contest. These are the things that we want to experience in the Worldwide Finals.

#### Links to more information

[www.cmirg.com](http://www.cmirg.com)  
[www.cmirg.com/pepenator](http://www.cmirg.com/pepenator)  
[www.cmirg.com/pepenator/mobil](http://www.cmirg.com/pepenator/mobil)





Morocco



## DREAMTeam1

Team Members

Amine Barigo  
Ismail Alami  
Salma Kharraki  
Youssef Yousfi

Mentor

Nabil Madrane

**Title of Project** CATCH IT!

### Project Overview

The project presented by DreamTeam1 combines a great number of Microsoft technologies in order to present an entire system for management of the catastrophes in a general way. In any emergency situation, the most important factor is to save time that it takes for rescuers to reach the damaged area. It's also very important to take into account a great number of parameters (like wind, geography of the affected zone, position of the rescue squads, moisture, etc.). This means it is crucial to set up a system that is capable of incorporating several different flows of information within the same graphic interface. The innovative aspect in our solution is due to the fact that we bring a technical solution which rests on the integration of several complementary technologies so as to protect the environment effectively. This is thanks to Virtual Desktop, which allows a real-time connection with the rescue teams. The time savings is significant and the command center has the information it needs to gain total control of the situation, so the rescue teams are not left isolated on the ground.

### Technology/Software Used

- Visual Studio 2008
- Expression Blend
- Expression Media
- Expression Design
- XML Web Services
- SQL Server 2005
- C#
- Zam3D
- Windows Presentation Foundation

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

In our school we take comprehensive courses in programming and software design. We also have studied several Microsoft technologies during our five years of courses. Thus, it was very interesting for us to enter this contest because we were able to put our knowledge to work.

**What has been your favorite part of the Imagine Cup competition thus far?**

Having the opportunity to design a complete system ourselves! The regional finals were also a very exciting experience.

**How did you come up with your idea?**

We are very impressed by all the stunning human-computer Interfaces that we see today. We wanted to apply these technologies to the Imagine Cup contest because we believe that powerful and easy-to-use interfaces are key elements when it comes to managing time-critical environmental rescue operations.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

First, we will set up a research and development lab in our school for promoting and further enhancing this technology. We also would like to establish preliminary business related contacts with local partners in Morocco.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

It's very challenging to compete with the best student teams in the world! We look forward sharing our vision and ideas with them. Last but not least it will be a pleasure for us to have a closer contact with Microsoft and have the opportunity to demonstrate our skills.



## Netherlands



### Four Elements

Team Members  
 Michiel Schuurman  
 Nick Joore  
 Ricardo Quirante

Mentor  
 Rob Zoetewij

**Title of Project** Guardian of Eden

#### Project Overview

We want to make children aware of the importance of creating a sustainable environment. To achieve this goal, we created an interactive 3D environment where the player will be confronted with a number of environmental problems which they have to solve. This way the child will be learning about the environment. Parents receive a parental guide that describes the environmental issues, which their child will encounter through the game. This also enables them to talk about environmental subjects with their children.

This project has a close connection to the real world. Because of the big similarities, the children will make a connection between the game and the real world. By experiencing the benefits of a sustainable environment, the player will learn that reducing pollution affects the world in a positive way. They will immediately be rewarded for taking care of the environment.

With our game we created an online community through Xbox-LIVE®/Windows Live. The player can play different types of mini-games online.

#### Technology/Software Used

- Visual Studio 2005 Express
- Visual Studio 2008 Standard
- .NET Framework 2.0
- .NET Compact Framework
- C# 2.0
- XNA 2.0
- XML
- Silverlight 2 Beta 1

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Because of the interesting theme of the Imagine Cup, we got inspired to create a product that will inspire people and is fun to use. We think that technology can be used more efficiently to help improve the world. With Software Design we can reach our group goal with the use of different media channels. This project has endless possibilities, so the only limit is our creativity!

#### What has been your favorite part of the Imagine Cup competition thus far?

You can share your ideas and meet other people. When you have a good idea, there is an opportunity that the product will actually be realized. Our project can then be applied at a global scale. It is also great to work with a small group of motivated people. We each have our own abilities and areas of expertise, such as design and programming. We are all very passionate about working on this project and believe that our product makes a good contribution to the environment.

#### How did you come up with your idea?

Most environmental campaigns only focus on adults. But our children are the future so we have to put the main focus on them. We often see children throw litter on the ground, and we really want to educate these kids to know more about the consequences.

A good way to reach children is to let them experience it firsthand. We think a game is a very effective way to confront them with environmental issues. To keep hold of a child's attention, we created an interesting storyline for our game, where children can solve environmental problems.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We plan to realize our product, but at the moment we're considering different kinds of business opportunities.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We're looking forward to meeting and competing against teams from all nationalities. We are glad to be a part of the finals and hope to have an experience of a lifetime!

#### Links to more information

[www.guardianofeden.nl](http://www.guardianofeden.nl)





## New Zealand



### Team Phoenix

Team Members  
 Stephen Fitchett  
 Louis Sayers  
 Janina Voigt  
 Yugan Yugaraja

Mentor  
 Warwick Irwin

### Title of Project Taxibus System

#### Project Overview

At a time when the planet faces large-scale damage caused by carbon dioxide emissions, road traffic is increasing, causing congestion and frustration. Our main form of transport is being threatened by rises in oil prices, and we have no real backup plan. We need a new form of transport that can provide the low-cost and environmental-friendliness of public transportation, without sacrificing the convenience of a car.

We've created the underlying algorithms to allow such a form of transport to work, and a simulation to prove the environmental benefits, cost savings, and effectiveness of this system. We call it the Taxibus System. Imagine fleets of minibus-style vehicles driving around a city, picking up people from their current location and dropping them off at their exact destination! Along the passenger's journey, other passengers who are travelling in the same general direction are also picked up, so that the passengers are effectively sharing the ride, along with the cost and carbon dioxide emissions.

Passengers use the Taxibus Web site or a standard cell phone to book a ride, and the average waiting time to be picked up is just a few minutes. The Taxibus System receives ride bookings from passengers, and GPS messages from the taxibuses. The software then calculates which taxibus should pick up a particular passenger, and replies to the passenger to inform them of the pick-up time. Each taxibus's GPS unit shows the driver where its passengers are and what route to take to pick them up and drop them off.

We've created the means to provide a form of transport worthy of the 21st century. We hope that taxibuses will become the number one form of transport.

#### Technology/Software Used

- Windows Vista Business
- Windows Server 2003
- Windows XP
- Visual Studio 2008
- Telogis GeoBase 2.8.1.0 SDK
- .NET Framework 3.0
- Virtual Earth SDK version 6.0
- ASP.NET 2.0
- AJAX Control Toolkit 3.5
- LogixMobile mCore™ .NET SMS Library 1.2

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The Imagine Cup provided a great opportunity to make a difference in the world. The environment is the single biggest issue to our generation and now is the right time to make a big difference. We chose the Software Design invitational because we thought it provided the best way to change the world out of all the categories. It was a great chance to combine our creative and technical skills to create something new and exciting, and to learn a variety of skills that will be useful in our future careers.

As the competition progressed, we were surprised by just how much experience we were gaining from it. We presented to a large number of groups, including transport companies, software companies, transport policy analysts, politicians, academics at our university, and business mentors. The contacts and skills we gained from this are invaluable.

#### What has been your favorite part of the Imagine Cup competition thus far?

The gradual realization that our project can make a huge difference to the world has been amazing. We've presented to a wide range of people from business, political, and academic backgrounds and we've seen people's eyes light up to the idea every time. It's been a great experience seeing our idea outgrowing the competition.

#### How did you come up with your idea?

We spent a lot of time considering various projects related to public transport. We realized that the biggest barrier to mass adoption of public transport was that it wasn't nearly as convenient as taking a car. That was when we started looking for a more convenient solution that was still environmentally friendly, and we came up with the Taxibus System.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We are looking to run a local trial of the Taxibus System when we get back to Christchurch, New Zealand. We are in talks with a local transport company, various investors, and our local city and regional councils about how best to get the trial running. If it's successful we hope to grow the system to cover the whole city, and eventually other cities too.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We're really looking forward to meeting all the other teams and exchanging ideas. These are some of the people who are going to change the world and it will be amazing to see the variety of innovative ideas they've come up with to solve the planet's problems. We're also really excited about travelling to the opposite side of the world. No team lives farther from Paris than we do!

#### Links to more information

Team blog: <http://imaginecup08.spaces.live.com>







## Nigeria



### CarBurn

Team Members  
Olatunbode Olajide  
Ezeokoye Celestine  
Adepeju Oluwaseun

Mentor  
Dr. E. P. Fasina

**Title of Project** CarBurn

#### Project Overview

CarBurn is part of a proposed framework that is made of three components that work together to create better environmental conditions. These three components are the chip firmware, the Web service, and the data center. The chip firmware is created to work with the Engine Control Unit (ECU) of cars. It picks up the quantity of CO<sub>2</sub> being emitted. The data is logged and sent to a Web service that is hardcoded in the firmware. CarBurn firmware can work with internal combustion engines of cars, aircraft, etc. The Web service picks the data from the firmware and sends it to the data centre. The data centre contains the database that can be used for environmental analysis based on location, engines, etc. The information can now be available to government agencies, private organizations, and individuals.

#### Technology/Software Used

- Visual Studio 2005 Express
- .NET Framework 2.0
- Visual Studio 2005 (using C# .NET as a programming language)
- SQL Server 2005 Express Edition (database)
- ASP.NET
- XML Web Service
- Windows XP SP2

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We were inspired by the challenge "Imagine a world where technology enables a sustainable environment." Being problem solvers, we took it upon ourselves to contribute our skills in solving our environmental problems. We also had always wanted to showcase our programming skills and the Imagine Cup was a perfect platform to do just that.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part has been the software development process. The entire process of putting ideas into action and seeing our ideas materialize has been so fascinating. Winning has also been interesting too. It feels good to have your ideas and work appreciated by others. The teamwork has also been great. We're people from different cultures and backgrounds, and working together has been a bit challenging, but ultimately interesting...and fruitful.

#### How did you come up with your idea?

The CarBurn concept came directly from interaction with our mentor, Dr E. P. Fasina.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Yes. We intend to use our framework to provide a sensor-based environmental monitoring system. The system will be online, real-time, and scalable.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to winning the Imagine Cup and also building a network of friends who are software developers. We also plan on having a lot of fun too.

#### Links to more information

<http://www.teamcarburn.blogspot.com/>





## Norway



### eBusters

#### Team Members

Christian Johannessen  
Trude Martinsen  
Richard Dante  
Kristian Soelve Ravndal

#### Mentor

Ruben O. Larsen

#### Title of Project eBuster

##### Project Overview

eBuster is an online community where you, the member, are able to upload images (via mobile phones, Facebook, personal computer) of locations where the environment is hurting and other users can rate the picture. It will be possible to "bust" big companies and make the world see how they pollute.

The last few years, the environment has been put into focus, but companies and individuals pollute more than ever. We throw away more garbage than ever, and we use up natural resources. In the center of Oslo, the capital of Norway, they remove 20 tons of garbage every week.

eBuster is a social networking Web site whose main focus is helping to make the environment more sustainable. We let the community members of eBuster upload their pictures of pollution or other hurtful scenarios for the environment. eBuster makes it easy to upload and geotag pictures or videos with built-in mapping capabilities based on Virtual Earth, making it public for the members where the pollution in our community or world takes place. If it's possible to track down the responsible company or organization, eBuster gives them a notice and make them aware of what's happening. They can react and respond to the eBusted case however they decide. The polluters can themselves decide what kind of exposure level they want, for the users to see. But we believe companies will react to the feedback they get, and won't want to be anonymous or have their reputation hurt.

The members of the Web site that upload images and make ratings will be rewarded with points on the "eBuster gametag." This will engage people to actually look for polluted areas, and this will make them more aware of pollution. eBuster opens the door for normal people who never felt they had the power to make a difference, and enable them to react and see the results of their actions for themselves and for the community at large. We make it "Cool to be green"!

##### Technology/Software Used

- Microsoft Server 2008 Standard
- SQL Server 2005 Enterprise Edition
- IIS 7
- Visual Studio 2008 (SP1 Beta)
- Expression Blend 2.5 (March 2008 Preview)
- Expression Web 2
- Windows Live SDK
- .NET Framework 3.5
- .NET Compact Framework 3.5

- Facebook.NET Build 0.3.0.0
- MVC Web Application Framework (Preview 3)
- ADO.NET Entity Framework (Beta 3)

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Some of our schoolmates and our mentor entered the competition in 2007. They did a great job and went to the world finals in Seoul, South Korea. Their experiences and stories inspired us to participate this year. They shared with us their view about the competition and what great experiences we can gain by entering the Imagine Cup. When we started to form the group, we wanted to use our strengths and what we are learning at the university to the fullest. Therefore the Software Design category suited our group best.

##### What has been your favorite part of the Imagine Cup competition thus far?

We have had a great time developing our idea, researching, having meetings with environmental organizations, talking to teachers, and seeing our project take shape. The absolute highlight was when the judges announced, after a very long and tiring day, the unbelievable news that the eBuster team won the Norwegian finals with one point over the runner-up.

##### How did you come up with your idea?

We had a lot of ideas in the beginning of the project, including pollution disaster map survey, Co2 calculators, paper-free offices, and noise pollution neutralization. But after talking with different environmental organizations and professors at our university, we came up with the idea of a social-networking Web site with its main focus on making the environment better and sustainable. We wanted an idea that was fun to work with and that would inspire people to help save the environment.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We have discussed the possibilities of launching the project in a beta release for the public in Norway, maybe first Oslo, to see how they respond to the eBuster project. But since all of us are students we have many things to do besides eBuster, therefore this will take a while to accomplish. The eBuster project is still in development, so we will know better what to do when eBuster is further developed.

##### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are very curious to see the other teams' ideas and solutions. We are really looking forward to meeting all the other teams and making new friends and contacts.

##### Links to more information

Team page (news and team info): <http://blog.ebuster.org/>

Team member Christian Johannessen blog: <http://www.christianjo.com/>





## Pakistan



### Team V.I.E.W.

#### Team Members

Amer Tahir  
Farrukh Jawed  
Junaid Shafqat Paracha  
Hasanat Kazmi

**Title of Project** Volunteer Internet Environment Watch

#### Project Overview

Team V.I.E.W. believes that environmental degradation is one of the biggest problems humanity faces. We are beginning to realize that excess pollution in any one place threatens our entire planet. Therefore everyone on the planet has a right to know, and a responsibility to control, the level of this threat that poisons our environment. Given that a large proportion of humanity lives in urban areas, it is important that urban environmental degradation is understood and curtailed. Acquiring the vast amounts of data that define urban pollution, and getting people involved in the process, are major challenges; collecting data from the entire planet is a very intimidating idea and the cost of the infrastructure and human resources required for such a project would be exorbitantly high. Moreover, in developing nations, where it is difficult to implement legislation and enforce that legislation through regular monitoring, a cheap and effective monitoring solution is required. This is where the Volunteer Internet-Based Environment Watch (VIEW) comes in. VIEW is an innovative take against the urban pollution problem using a combination of software, a social network of volunteers, and the Internet. The goal of the project is to provide an autonomous, low-cost urban air pollution monitoring infrastructure. The software would analyze data, which comes from the Data Acquisition Devices (DAD), that is collected by volunteers. The software would provide a complete and comprehensive visual (maps), statistical (reports), and graphical (trend graphs) analysis. The software would also keep a record in its archive, which would be useful in not only giving the past situation of the monitored area, but also in the future planning and development of that locality.

#### Technology/Software Used

- Virtual Earth
- .NET Framework 3.5/Windows Presentation Foundation
- XML Web Services
- SQL Server 2005

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

In 2007 the team that won from Pakistan was from our university, so they were a big motivation for us. The environment theme itself is also motivating. It was our dream to win at the national level and represent our country at the international level. Losing was never an option. This was the biggest motivation we had!

#### What has been your favorite part of the Imagine Cup competition thus far?

It was like riding a roller coaster throughout this contest. We were the youngest team at the national finals, so we were under a lot of pressure because we were facing competitors far more experienced. Winning at the national finals was something we will cherish for many years to come!

#### How did you come up with your idea?

The theme for the competition was an excellent one to start work on. It was a highly challenging theme, no doubt, to work on. However, after a lot of brainstorming sessions we came up with the basic theme for our project: "If you can't measure it, you can't control it!" So we decided to make a software solution that would enable people and authorities to have both micro and macro analysis of the environment in which they are living, make them realize their responsibilities, provide a direct communication between the people and authorities, and eventually give accurate, precise, and up-to-date informational patterns of their environment.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We are being funded by the government to install VIEW in selected areas of our country. Once successful, we will continue deployment in other areas gradually.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are excited to be part of this global gathering of students bringing so many smart ideas to the table. We hope this will be a unique learning and social experience for everyone involved in the Imagine Cup and we expect a great competition.

#### Links to more information

<http://view.lums.edu.pk>





## Philippines



### Team 3\*Pi/4

#### Team Members

Wilhansen Joseph B. Li  
Salvador Reyes Jr.  
Rodrick K. Tan

#### Mentor

Ma. Mercedes Rodrigo

### Title of Project Macro

#### Project Overview

Macro makes it possible for people to actively participate in creating a sustainable environment. It enables consumers of any device (desktops, laptops, mobile phones, PDAs, etc.) with Internet access to conveniently access information on-the-go when deciding on a purchase. Macro presents organized information to the consumer, empowering them to make informed and environmentally sound decisions without the hassle of thorough research.

#### Technology/Software Used

- Windows Vista
- Windows XP
- Windows Server 2008
- Windows Mobile
- Visual Studio .NET 2008
- SQL Server 2008
- .NET Framework

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

One thing that sets the Imagine Cup apart from other software competitions is the chance to implement our ideas and exercise our various skills not only in programming but also in marketing and presentation, software analysis and design, and, of course, teamwork. Not only do we design software for a noble cause, we also get the chance to have our system be used in the real world.

As for why we chose the Software Design competition: it's flexible (we're not limited to what, where, and how to implement it) and it provides us an organized framework to follow (proposal, implementation, and presentation).

#### What has been your favorite part of the Imagine Cup competition thus far?

The best part so far was winning the Imagine Cup national finals. It reassured us that we were on the right track; that our idea can indeed work. Furthermore, it made our sleepless nights very much worth it.

More than anything, however, we would also like to see our entry outside of the Imagine Cup.

#### How did you come up with your idea?

During our design phase, a speaker from an environmental organization gave us examples of how information is such a vital tool in how we make our decisions. It is really amazing how preconceived notions that hinder us from making the correct decisions can be broken by information. For example, garbage is garbage; people think about garbage in such a negative way. But there are many things you can do with garbage. You can harvest methane to generate energy. And, of course, you can recycle it. With the right information, we can make environmentally sound decisions—and that is the same thing we're trying to do with Macro. We empower people to make environmentally sound decisions through information.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Our entry is still in its infancy. The blueprint is there, but real world implementation is usually a further challenge outside of the competition. We want it to achieve a balance between being realistic and still achieving our goals. Realistically, we will need backing from the industries and environmental organizations through partnerships. We're definitely open to launching a business after the Imagine Cup.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

Aside from our excitement from getting to tour around France, we look forward to how our entry will fare in the international stadium. The competition will surely be at a vastly different level with contestants participating from all over the world. It's a very rare opportunity to participate in an international event so, in a sense, this is like the programmer's Olympics; a slight relief for us because we're not athletically gifted enough to join the actual Olympics.

#### Links to more information

<http://imaginecup.com/PH/SD.aspx>

<http://technology.inquirer.net/infotech/infotech/view/20080415-130558/Ateneo-team-wins-Microsoft-Imagine-Cup-2008-in-RP>

<http://www.admu.edu.ph/index.php?p=120&type=2&sec=29&aid=5083>



Poland



## Demoscene Spirit

Team Members

Wiktoria Szydło  
 Agata Czapracka  
 Łukasz Michniewicz  
 Szymon Majewski

Mentor

Tomasz Gdala

**Title of Project** LifeTracker

### Project Overview

LifeTracker is a real-time telemetry system that helps to better protect animal species.

Biodiversity is an extremely important part of environmental sustainability. Animals, as an integral component of our environment, need protection when threatened. Without our care many species may soon die out. To stop or even reverse the extinction of wild populations, active protection like reintroduction should be applied. Such actions have to be supported by telemetry. The telemetry tools presently used are rather ineffective.

We created a system that incorporates many available tools and innovative solutions in attempt to enhance telemetry monitoring of animals. LifeTracker, a fully automatic system, brings us real-time data about the position of tracked animals in three-dimensional space. It also enables easy data management by automatic data processing. Processed data can be displayed in specialized graphs allowing researchers to gain better insight into a species' population dynamics.

The system can be operated by a few people, which makes research easier. It reduces costs and human effort. Thanks to LifeTracker, the stress put on animals and interference into their native habitat will be reduced.

LifeTracker not only raises the effectiveness of wildlife conservation projects but it also simplifies the biological field research essential for long-term protection of animals—as well as planning sustainable investments.

### Technology/Software Used

- Managed DirectX 3D 9.0c
- SQL Server 2005
- Visual Studio 2005 Professional
- Expression Studio
- .NET Framework 3.5
- .NET Compact Framework 1.1

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

We found the Imagine Cup was an excellent opportunity to highlight the need for active protection of dying species—and an opportunity to propose an efficient solution to many issues on this subject. The invitational allowed us to form a team that has the competent biological knowledge to seek solutions to real-life problems using modern technologies. We strongly believe that the best way of creating useful and efficient software is to invite prospective users to the process of creating it.

**What has been your favorite part of the Imagine Cup competition thus far?**

The best part of this competition is the teamwork. Demoscene Spirit, as an interdisciplinary team, consists of five people with different skills, interests, and points of view. We represent three branches of knowledge: mathematics and computer science, biology, and fine arts. Together we are able to find easy-to-use solutions to complex problems. Our project requires knowledge of each of those fields. As a team we can do more together than each of us could do alone.

**How did you come up with your idea?**

The inspiration for creating our system was the reintroduction of the edible dormouse as well as research on species conducted in Poland. The edible dormouse is a small mammal which is in danger of extinction, as are many other animals. Protection requires the improvement of technological tools. LifeTracker is a step toward achieving a sustainable environment in which endangered animals can survive.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

After the Imagine Cup finals we are planning to apply for a grant to build dedicated hardware (transmitters) and to test our system in the field concerning the edible dormouse. Summer would be the best time to conduct studies and test the system, as edible dormice are active until October. During those tests we will make improvements and adapt LifeTracker to practical application in the field of conservation biology.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We believe that a system like LifeTracker can really help in creating a sustainable environment so we are looking forward to presenting our system in the format of the very strict finals.



## Portugal



(void \*)

Team Members  
 André Sousa  
 Marco Barbosa  
 Martinha Rocha  
 José Faria

Mentor  
 João Barroso

**Title of Project** Smart Containers

### Project Overview

Today, companies that recycle vegetable oils are facing a problem. They collect vegetable oil in restaurants and from fast-food establishments. But most of the oil consumed isn't being collected to recycle because it is being thrown in the garbage, or even worse, in the sink. And the few people that collect the oil for future recycling don't know where to deliver it. This happens because companies feel that household consumers don't collect enough oil to justify the investment. So for both sides this is a giant problem.

Consumers don't have a place to deliver the collected oil, and most of them really don't care, using the excuse, "I don't have time to find where the collecting point is, and go there to deliver a very small quantity periodically." For the company, this is a problem because they collect a very small quantity in each place when compared to an industrial consumer.

So our idea is to create a system that allows the regular home user to collect vegetable oil in a "smart container." When the container is 80% full, it sends an alert to the recycling company that it is ready to be picked up and taken to a recycling facility. The investment is more profitable and much simpler for both the home user and the recycling company.

### Technology/Software Used

- .NET Framework 3.5
- .NET Compact Framework 3.5
- .NET Micro Framework 2.5
- GSM Technology
- Windows Mobile 6 Professional
- SQL Server 2008
- SQL Server Compact Edition 3.5
- LINQ to SQL
- Virtual Earth SDK 6.1
- ASP.NET Web Services
- Visual Studio 2008
- Expression Blend 2.5 (March Preview)
- Expression Design 2 beta

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

When we formed the team, we didn't have the idea; we only knew the theme for this edition of the Imagine Cup. This was the most important part, because we always had ideas to protect the environment, but we never had the opportunity to really create something that could be turned into reality. Recently we had seen in television, in conferences, or on the Internet that the environment is reaching a point that maybe will not be bad for us, but it will be bad for our children and grandchildren's future. So now is the time to start creating solutions for all the bad things we have done in the past. This is the opportunity to do our part and alert people to start thinking about what they can do to help save the environment.

We chose the Software Design invitational because three of the four members of the team are from the computer science area, so it became clear that if we want to create an idea that could really work, we should use the tools and the knowledge in our areas that we are good at.

**What has been your favorite part of the Imagine Cup competition thus far?**

To be able to create something that can help solve a real problem—and that also protects the environment—gives us the feeling of a job well done. At the end of the day we look back and think that we have tried to make something that can help our children live in a better world. For us this is undoubtedly the most important part of the competition.

**How did you come up with your idea?**

We had several ideas and none of them were, at least for our objectives, good enough for the environment or realistic enough to implement in reality. Our main goal was to create something that helps the environment, but that does not require the people using it to have to change their habits. This is important for a real implementation of any idea: the less change in behavior the easier it is to implement it. The idea came while one of us was making a tuna sandwich.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

Our idea is not big enough to create a new business, but it can be integrated in the used vegetable oil recycle business, and in that area there are already lots of companies that can reduce their investment, making it more efficient with our product. Our idea has many impacts: if the oil is recovered it is not polluting the soil and the water resources; also the more oil recovered, the more biodiesel is produced that can be used as a substitute for fossil fuels.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We think this will be a great experience, not only professionally, but personally. We will meet lots of people from around the world, and come to understand their points of view, especially where environmental protection is concerned. We want to learn about the way they see life, the world, and the future of mankind. We think it is important to see how different countries and cultures mix together to create something to help everyone.

**Links to more information**

<http://smartcontainers.utad.pt/>



## Romania



sm@rtDEV

Team Members  
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Radu Meza  
Cristina Ciuhuță  
Diana Zoicaș

Mentor  
Dan Mircea Suciu

**Title of Project** GreenLife MMORPG

### Project Overview

Our solution, GreenLife, has a game as its main component. Players enter a virtual world in which they can recycle and build a profitable ecological economy. By keeping in contact with the real world, with two components that address the garbage collecting centers and shopping centers, we reward the users for their environmentally responsible attitude. We try to induce eco-friendly behavior by playing a game, and exploiting the dependence of the users to these kinds of games. This way, we use information technology to make use of the benefits of a known behavior, and to redirect that dependence/attraction to taking steps to protect the environment.

### Technology/Software Used

- .NET Framework 3.5
- Visual Studio Team System 2008
- ASP.NET
- Windows Presentation Foundation
- Windows Communication Foundation
- Windows Live ID SDKs
- Windows Mobile SDK v6
- SQL Server 2008
- Expression Suite
- Microsoft Live Labs Volta
- Virtual Earth v6 API
- 3DVIA Shapelt
- Silverlight 2.0
- Windows Server 2008
- IIS 7.0

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We are a group of computer science students with a common passion for technology. We see each competition as a challenge, and the Imagine Cup is our favorite competition. The Software Design invitational is very popular in our country, together with the IT Challenge invitational, and our choice was based both on the chance to compete in a team, and on our experience with this invitational, having previously come in third in the local competition.

Another factor that helped us decide to compete was the theme of the 2008 competition, offering us two motivations: to win and to help the environment. We saw in this year's competition an opportunity to compete with great, uncommon, and interesting ideas, and it seems we were right.

### What has been your favorite part of the Imagine Cup competition thus far?

The national finals were the most interesting part of this invitational so far, providing interaction with the other teams. We had the chance to meet students with the same passion for technology, innovation, and interesting ideas, and we saw some really nice solutions.

### How did you come up with your idea?

Brainstorming, brainstorming, brainstorming ... then rejecting all the ideas and starting again, until our goal was reached: to come up with something uncommon, to avoid predictable ideas, and to surprise our audience.

We started with the prerequisites: a software solution, with as little hardware as possible; a viable business idea, with low costs, high impact, and attractiveness; our solution should not change behaviors directly, but simply protect the environment and induce a behavior in a pleasant and discrete manner. We also wanted to provide education and entertainment.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We think that our idea is interesting as a commercial project mainly because of the interaction with the real world, and the advantages it presents in the collaboration with hypermarket networks and recyclable waste-collecting centers. Offering low implementation costs, and the chance to promote the game easily (advertising in collaboration with markets), our solution seems a good opportunity for a successful and fast growing business.

We believe that the catchy story behind the game and the attractive graphics, together with the rewards from the real world, will contribute to the success of the idea.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

We can hardly wait to see the other teams' ideas, to meet the other finalists and company representatives, to see business strategies, to get in touch with passionate people, and see how our idea can go further. We are looking forward to opportunities for interaction between solutions, to starting partnerships, and last, but not least, to having a great time in Paris.

### Links to more information

<http://smartdev.ro.tl>



Russia



## Ignition

Team Members  
Anatoly Nikitin  
Roman Belov  
Daria Elkina

Mentor  
Yury Shur

### Title of Project Vigil: The Decision-Support System for Wildfire Fighting

#### Project Overview

Vigil (formerly Arina) is a multi-purpose system that helps wildfire fighters to work more efficiently. It includes wildfire spread and suppression models, decision-support components for planning firefighting strategies and preventive measures, analytical components for evaluation of firefighting effectiveness and wildfire risks, GPS-based mobile applications for gathering information about fires, satellite images processing, machine learning algorithms, and weather information retrieval subsystems. The project is being developed under the direction of the Saint-Petersburg Forestry Research Institute since October 2004.

Vigil's engine is a self-tunable wildfire simulator that gives a short-term fire spread forecast. It constitutes a combination of several mathematical fire spread models developed in Russia, Canada, and the United States. During the maintenance of Vigil some parameters of these models will be constantly tuned through analysis of real wildfire expansion.

The fire suppression model works over the fire spread simulator and allows firefighters to compare different firefighting strategies and calculate potential fire damage and suppression costs. Although most applications of the system are Web-based, some of them are designed for offline use because they may be used in the forest environment directly during the firefighting actions. That's why we had to make our models lightweight—so that they can be launched even on common laptops.

For scaled computations, such as preventive measures calculation, Vigil uses Windows HPC technologies.

#### Technology/Software Used

- Visual Studio Team System 2008 Team Suite
- SQL Server 2005 Express Edition
- .NET Framework 3.5
- .NET Compact Framework 2.0
- Windows Mobile 5.0
- MapInfo MapXtreme 6.6
- MapInfo Professional 9.0
- Windows HPC Server 2008
- Popfly
- LINQ
- Virtual Earth

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The development of Vigil had started long before the topic of the Imagine Cup 2008 was announced. We learned about the Imagine Cup by pure accident in January 2008, when most of the teams were already in the race. Two months before that we had started remaking our project, converting it from Delphi to the .NET platform and introducing new Microsoft technologies. So we didn't have any doubts about our participation in the Microsoft Imagine Cup especially since this year's theme is "Using technology to create a sustainable environment."

#### What has been your favorite part of the Imagine Cup competition thus far?

Probably the most exciting feature of the Imagine Cup is that it attracts many intelligent people and focuses their attention on some really sophisticated problems. At the Russian final we got great feedback on our project from different specialists: programmers, mathematicians, ecologists, economists, and even a professional wildfire fighter who has been struggling with forest fires for almost five years! And the most delightful moment happened when he thanked us for our work!

#### How did you come up with your idea?

The idea for this project was born within the Saint-Petersburg Forestry Research Institute about five years ago. Project mentor Yury Shur is a world-famous scientist in wildfire forecasting and firefighting theory. Our team started working on the project in 2006. Since then we have gathered and analyzed a lot of information about wildfire simulation and have developed a swift and effective wildfire simulation engine that was supposed to find many applications in firefighting practice. Then we've been working on different lines of investigation concerned with machine learning, satellite images, and GPS devices. Actually, just the participation in the Imagine Cup pushed us to combine all our separate ideas and researches into a single system that we called Vigil.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Just after our return from France we will take a group of high-level specialists from Saint-Petersburg Forestry Research Institute to Krasnodarskiy Kray. It is a southern region of Russia, where the Winter Olympic Games of 2014 will take place. There we will initiate the application of our system: preparation of the input information, gathering wildfire outlines using GPS-devices, launching the machine-learning algorithms, and starting our wildfire development and firefighting models that should improve decision-making procedures and decrease the damage from wildfires. If we succeed in this start-up project, we will launch a new company that will continue the development of Vigil.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We hope that we won't have time to go sightseeing and loitering in the Louvre. We are gonna ignite Paris!





## Saudi Arabia



## EnviroMate

Team Members  
Omar Al-Amodi  
Talal Al-Asamri  
Eyad Al-Sibai  
Yaser Sulaiman

Mentor  
Salman Al-Ansari

**Title of Project** EnviroMate

### Project Overview

EnviroMate was proposed as an attempt to solve some of the critical environmental problems the world is facing, beginning with the pollution produced by factories, cars, etc., and extending to the harm caused to human health. In addition, there is a lack of tools to track polluted spots around the globe in a unified manner. Furthermore, there is a deficiency in notifying people and scientists about polluted areas in the world to take corrective actions. People tend to identify the polluted spots in an ad hoc manner, for example, through physically observing the area. EnviroMate solves those problems by advancing the processes of Detection, Visualization, and Correction in an innovative manner. Our environment gets better attention and people and organizations receive real-time information.

In the Detection step, the system collects detailed information about polluted spots, in real-time, using the sensors that are spread around the Location Under Inspection (LUI). In the Visualization step, the data gathered from the first step is visualized using maps. Visualization is bound tightly to Microsoft MapPoint Web services to deliver the maps. Moreover, GPS chips are embedded on microcontrollers to deliver the exact coordinates of the LUI. Finally, in the Correction step, cumulative results from the first two steps are gathered to take the appropriate actions (e.g. sending SMS messages to the desired people based on the location of pollution).

By detecting, visualizing, and taking the corrective actions on time, EnviroMate ensures proper awareness, well-dressed tracking of tourists' sites, and a better place to live for all.

### Technology/Software Used

- Embedded technology
- ZigBee Protocols
- MapPoint Web Service, version 4.5
- Expression Blend
- .NET Framework 3.5
- C#
- Web Services
- SMS Messaging
- SMTP Notifications
- Social Network Integration
- Visual Studio 2008

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

The broad spectrum of opportunities as well as the great amount of challenges presented by people and ideas in the Software Design competition. In addition, there are still worldwide gaps between software demand and software market. These can be transformed into entrepreneurship opportunities.

**What has been your favorite part of the Imagine Cup competition thus far?**

Presenting our work in a persuasive manner.

**How did you come up with your idea?**

We sat together for many brainstorming sessions until we came up with this idea. The threats to the environment and the limitations we found in current software tools inspired us to get this idea.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

We plan to establish our own entrepreneurship to utilize our system. We will try to work with money capitals in Saudi Arabia and worldwide to make excellent environmental software tools.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We are looking forward to experiencing the excitement associated with such a global event, the thrill caused by competing with the best international teams, and the joy of being among the world finalists. We are also looking forward to sharing ideas about using technology to maintain a sustainable environment with the other teams and learning from them.

**Links to more information**

(Soon) <http://enviromate.psdgroups.com>



Serbia



## Cluster

Team Members

Saša Lazarević

Tijana Djukić

Milorad Ničić

Nebojša Nedeljković

Mentor

Nikola Milivojević

### Title of Project FEAT

#### Project Overview

The FEAT project encompasses the development of a software platform and mashups for decision support and crisis response to support environmental management, public awareness on environmental issues, and environmental problem solving. FEAT is based on a global community monitoring network. The monitoring network itself is based on the Facebook social network, and corresponding client applications are built on the Facebook API. A server application provides trustworthiness mechanisms through the WCF Web service, supported by a distributed database. Users can report on positive or negative events from defined categories, or can choose to supply additional expert information, if authorized. An event report includes spatial and temporal data, and optional media (photos, movies, etc.). A ranking system based on event data is applied, and augmented trustworthiness mechanisms are used to provide objective quantitative measures. Special XML-based language (EcoML) is designed for serving event data to clients. Users can track venues of interest, or have alarms on local hazards. Public media is provided with information, and experts from institutions related to environmental management can use obtained quantitative measures for statistical analysis of spatial data.

The platform in FEAT is scalable and supports implementation of various assessment tools operating on EcoML data. It relies on ever-growing Facebook's base of users and existing social networking mechanisms.

#### Technology/Software Used

- Visual Studio 2008
- .NET 3.5
- C# programming language, ASP.NET
- Virtual Earth SDK
- WCF Web services
- Silverlight 1.1
- AJAX Control Toolkit 3.5.2
- SQL Server 2008 CTP 6

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

Our entire team has been programming for many years using Microsoft technologies, so it was logical to test our knowledge and capabilities against other people with the same interests.

For six years now we have been actively following this competition and this time the environment theme really inspired us to take part.

**What has been your favorite part of the Imagine Cup competition thus far?**

There have been many interesting things. As persons who are actively engaged with IT, it is always interesting to become familiar with new technologies. The teamwork on this project gives us new motives to continue working. The project presentation at the national finals was a new and very interesting experience. But we know that we have a trip to the world finals in front of us, and we are sure that we will come across many more interesting things while meeting interesting people.

**How did you come up with your idea?**

The idea itself was in our minds for some time, but this competition enabled us to bring these ideas to realization. We used Facebook because of its rising popularity, knowing that Microsoft recognized its growing potential.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

FEAT software is designed as a product that could really enable transparency of data related to ecology and the creation of public consciousness. FEAT is constantly being adapted with new technologies (Virtual Maps, Spatial Data, etc.). It enables quick and easy locating of an event anywhere in the world, which represents a big plus for users in adding new events. So the goal is to gain as much data as possible, so users are able to add reports quickly and easily. Considering the fact that we have many ideas and plans, we will place FEAT as a new product for ecology purposes.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

There will be many interesting and high-quality projects in one place. Each will find its own way to help solve the problems in our ecology. It will be interesting to discover what other teams are thinking and how we can work together to help our planet.

**Links to more information**

<http://cluster-team.spaces.live.com/>



## Singapore



### MamaGaia

#### Team Members

Yang Lin Koh  
Ryan Chia  
Phyo Myat Thu  
Alicia Tay

#### Mentor

Chin-Lock Oh

**Title of Project** CoralTellus

#### Project Overview

Coral Reefs are dying at an alarming rate. In the last few decades, human activities such as overfishing, coastal development, and water pollution caused by chemicals and factory wastes have destroyed over 35 million acres of coral reefs. If we don't do something to arrest this, we will lose 40% of the world's corals in the next 10 years. Corals play an important role in regulating our climate as well as in supporting a wide biodiversity of marine life. Corals also are used in cancer and HIV treatments. They also provide the livelihood of millions of people who depend on them. And two-thirds of the world's coral reefs are in South East Asia, where we live!

To save our corals, we've developed CoralTellus—a system that autonomously controls and adjusts the various parameters (temperature, salinity, pH, etc.) essential for coral development and protection in coral nurseries, and the monitoring of parameters in oceans.

CoralTellus is based on three innovative Cs: Customizable, Centralized, and Cost-effective.

- Customizable: Users are given the flexibility to choose the parameters they want to monitor and the type of sensors that suit the different types of corals to conserve.
- Centralized: CoralTellus is able to centrally monitor multiple coral environments simultaneously.
- Cost-effective: CoralTellus uses green technologies and AI to optimize energy usage.

Moreover, through the use of acoustic thermometry and Micro-Electro-Mechanical Sensors, our solution is scalable in oceans at a low cost.

#### Technology/Software Used

- Visual Studio 2008
- XML Web Service
- .NET Framework 3.0
- SQL Server 2005
- Mobile Device

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

The theme this year is an exciting one! We want to challenge ourselves to use IT innovatively to create a sustainable environment for Corals. The Microsoft Imagine Cup competition is a good platform to bring what we have learned about real life problems facing corals today and our solution to the world stage. What excites us is that our effort put into the competition is not just an academic exercise; it can potentially make a difference by solving real environmental issues facing the world today!

The Software Design invitational is a very good competition which allows us to marry our twin passions of IT and the environment. The competition requires us to think through the problem deeply, stretch our imagination, and innovate. The software we design has to be viable. Through the Software Design invitational, we will learn how to bring our idea across and present it in the most convincing way to different panels of judges. That's why we chose the Software Design invitational!

**What has been your favorite part of the Imagine Cup competition thus far?**

The Microsoft Innovation Accelerator no doubt! Through the Microsoft Innovation Accelerator we have been exposed to people from the industry and have had many opportunities to mingle and interact with the Company CEOs, Venture Capitalists, and various senior executives in the IT industry. Also, the Meet-the-Bosses session has widened our perspective as they shared with us their invaluable expertise and knowledge. They taught us to look beyond our current application to make it viable and successful in the industry. It has indeed been an enriching experience and a learning process for each and every one of us on the team.

**How did you come up with your idea?**

We've interacted with many people, from diving enthusiasts to members of nature organizations. One key problem that surfaced was the tremendous damage done to coral reefs worldwide. We realized that while many people know about the common problems of the environment, not many know what the Corals are facing and how important are they in our ecosystem! So we have been inspired to come up with a solution to help save the corals and we are glad that our intention is in line with the International Year of Reef as well as the Microsoft Imagine Cup theme.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

We plan to deploy this application in Singapore and in the world! In fact, we have started approaching Marine R&D firms, marine nature conservation organizations, and venture capitalists. We are currently in discussion with Underwater World Singapore, which has offered us a test bed for our system to be used in its conservation efforts.

In Singapore, the conservation of corals is part of our local government's plan to make Singapore a coral paradise. This offers us many opportunities to employ our system to enhance these efforts.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

Our team looks forward to meeting the other competitors who share our common passion in IT and the environment. We hope to learn more about the various creative solutions they've come up with to save the environment. We are also excited to have the opportunity to be on the world stage and to share what we've learned about corals as well as our application to save them.

**Links to more information**

<http://mamagaia.spaces.live.com>





Slovakia



## Housekeepers

Team Members

Marián Hönsch

Michal Kompan

Jakub Šimko

Dušan Zeleník

Mentor

Prof. Ing. Mária Bieliková, PhD

**Title of Project** Energy Consumption Manager

### Project Overview

Mankind's energy consumption is enormous. Since sources of power are limited, it means we are slowly exhausting the planet. In addition, since energy transformations (coal power plants, engines, etc.), are not generally friendly to the environment, this means there's a serious issue for people to solve. In the United States, 51 percent of the energy is being produced in coal power plants. Up to 10 percent of the produced energy is absorbed by the power grid itself. Additionally, in many cases the energy is used non-effectively. To make a contribution to the world preservation, we need "only" to detect such situations and find proper action to solve them (from simply switching a light off to more effective appliance design). Energy Consumption Manager (ECM) is a system that focuses on this in the milieu of our households, since they use a significant amount of energy.

Our intention lies in detailed monitoring of electric energy consumption in a household based on the measuring of expenditures of individual appliances. Measuring is done by devices plugged between the power source and appliance. Data are transferred wirelessly and collected at a central antenna. Then they are passed to ECM Application that runs on a home PC. The application analyzes received data and presents statistics about the user's home consumption and suggests where improvements can be made. There's personalization according to different users' nature and habits.

If a user allows, anonymous data from the household can be shared with others and vice versa. This improves the analysis, since we can then follow up on current trends and standards. Aggregated data are also shared with appliance producers and distributors, in exchange for technical details about their appliances. Since the demand for effective appliances will grow, producers will be forced to adapt and produce more environmentally friendly devices.

### Technology/Software Used

- SQL Server 2005 Developer Edition
- .NET Framework 3.5
- .NET Compact Framework 2.0
- .NET XML Web Service
- Windows Presentation Foundation
- MPLAB IDE v8.10
- MPLAB IDE C18 C Compiler, SE
- TCM 130 Step Code BA Software API
- Windows Embedded CE 6
- IIS Server 6.0

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

Our competitive nature, sense of responsibility, the tradition of our school, and our wonderful mentor made the difference. We also undertook the competition as a test of our skills and will. Due to our professions, we have chosen Software Design. We also believe it has the greatest potential for creating something useful.

**What has been your favorite part of the Imagine Cup competition thus far?**

The adrenaline rush a short time before our presentation at the regional semifinal.

**How did you come up with your idea?**

At our early sessions everyone came with couple of ideas. Some of them were weird, so we filtered them quickly. But the idea of measuring and reducing energy usage at home engaged us over and over, since it could be applied massively in society. Of course, we were telling ourselves that the idea is nothing new, energy is measured everywhere. But we discovered that there really is no sophisticated solution for measuring that offers a complex analysis of consumption, nor effective matters to reduce it.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

There are a couple of companies interested in our idea. At this time we cannot say how we will treat these offers. All our team members plan to continue in master study at our faculty and it is very difficult to find the time for both of these activities.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We hunger for the competition atmosphere. Just to be part of a great thing, walking around, watching and speaking with our rivals. We also look forward to enjoying the place, the city, and people of Paris.

**Links to more information**

<http://csidc.fiit.stuba.sk/2008>



Slovenia



## Ogreenize!

Team Members

Anže Furlan  
Matjaž Horvat  
Jernej Gorički  
Domen Grabec

Mentor  
Martin Breskvar

**Title of Project** Ogreenize!

### Project Overview

Our main goal is to increase environmental consciousness. History has shown that people don't find environmental content interesting enough. So we wanted to develop a solution that would not only educate people, but allow its users to have fun when dealing with it.

Ogreenize! is an online community service that collects ecological information on products we use daily. The more time users spend on Ogreenize! the more environmentally conscious they become and the more ecocredits they earn. With ecocredits they have the opportunity to participate in the game that is the part of our system. We also connect consumers with common interests, so they can learn about the products that are related to them.

### Technology/Software Used

- SQL Server 2005 Developer Edition
- Silverlight 2.0
- Visual Studio 2008
- SQL server 2005
- LINQ
- REST
- C#
- Expression Blend 2.5 (March Preview)
- Windows Internet Explorer® 8 (beta) Activities
- ASP.NET 3.5
- Popfly

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

We are a group of people that want to do something extraordinary in our lives. And we are all trying to do something that is going to serve the common good. And when we saw this year's theme for the Imagine Cup we said "This is the thing for us!"

**What has been your favorite part of the Imagine Cup competition thus far?**

Seeing how well our team functions under a great amount of pressure. Also, learning new technologies and the excitement of the world championship in general.

**How did you come up with your idea?**

That was easy. We just scouted out the source of the pollution and environment problems. And we realized that the problem is not in transport, industry, or recycling garbage. The problem is in us all. Overall we humans are not environmentally conscious. So we made a product that will correct that.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

We are very eager to launch a business out of this product and we hope a lot of people will find our product interesting.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We really want to see what other teams have done and we hope to meet as many interesting people as we can.

**Links to more information**

[www.ogreenize.com](http://www.ogreenize.com)



## South Africa



Photography by Vaunski Nell

### Team Smile

Team Members  
Devin de Vries  
Christopher King  
Nabeel Nazeer  
Nadeem Isaacs

Mentor  
Michael Eccles

### Title of Project WhereIsMyShuttle?

#### Project Overview

Imagine Paris, New York, or London without their sophisticated underground public transport systems. The millions of commuters who use their own cars. Imagine the traffic jams, the pollution, the lost hours, the accidents. We don't need to imagine this in Africa, a continent of developing countries. In South Africa we try to imagine an efficient, sophisticated, reliable, comfortable, and secure transport system. Team Smile not only imagined this scenario, we identified the problems, found solutions, and designed a system utilizing existing software and technology so that IMAGINE became a viable reality. In South Africa, lower income groups, through necessity, use public transport, but the rest own private cars. This leads to over-crowded roads, excessive fuel emissions, and even greater resource inefficiency in many public sectors. The 2010 World Cup and the FIFA commission's appeal for improved public transport gave Team Smile a real-world problem requiring urgent resolution, where technology is implemented as the tool to create a more sustainable and efficient transport system. Our research identified lack of security and absence of bus schedules as the main reason for middle and upper income groups not using public transport. Research also led us to discover that South Africa, despite its high levels of poverty and unemployment, has the highest mobile-phone usage density per capita in the world. This proved an important point when deciding which technologies were most appropriate. Analysis of the existing routing and scheduling software found a COBOL legacy system from 1969 still in operation today. Team Smile realized that a modern and fully-integrated transportation system is required, giving the bus company:

- Tracking and scheduling control over their buses
- Detailed reporting facilities
- Live monitoring and notification services

Giving the public:

- Real-time service
- Access to arrival/departure times through their mobile phones
- IP cameras on the buses, integrated with the notification services

#### Technology/Software Used

- Visual Studio 2008 Team Explorer
- .NET Framework 3.5
- Microsoft SQL Server 2005
- SQL Server 2008
- Microsoft SharePoint® 3.0
- Visual Studio 2008 Team Foundation Server
- Windows Mobile 6 SDK
- Windows Server 2008
- PostgreSQL 8.2.3.1

- PostGIS 1.2.1.1
- NHibernate 1.2 (Object Relational Mapping tool)
- NUnit 2.4.0.2
- AJAX 1.0
- MapServer 5.0.0
- Web Client Software Factory (WCSF) 2.0
- IIS 7.0
- Web services
- GPS
- GSM Mobile Network
- HSDPA Mobile Network
- ASP.NET 3.5
- Visual Basic, C#, JavaScript, Python script

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

At the onset of our Information Systems (IS) degree at the University of Cape Town (UCT), IS students are exposed to the national Imagine Cup competition and are encouraged to compete in this prestigious event. The Software Design category forms a natural fit for our project as it acknowledges the creation of system-based solutions. Therefore, upon the release of the Imagine Cup 2008 theme in August of 2007, seven months into the development of our project, we immediately realized that our system was perfectly aligned with the theme of the event and represented our passion for improving our environment. From this point onwards the team set their sights on winning the national finals in order to participate in the world finals in Paris. Since then, the team has extended and improved the system, applying all possible efforts in an attempt to afford a maximized solution to satisfy environmental needs and solve current problems effectively and efficiently.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the competition has been the opportunity presented us to work together as a team for 17 months on something about which we are passionate and which makes a real difference in the environment and the world. The competition also has served as an enabler in that the decision-making people within the industry have learned about what we are doing, and are now implementing our system in order to make its benefits a reality.

#### How did you come up with your idea?

Our idea initially stemmed from the lack of predictability of our student shuttle service from the campus to the surrounding suburbs, a service students rely on. We decided to take a closer look at the general transportation problem within South Africa. We approached the South African Bus Owners Association (SABOA), who allowed us to do an analysis of our provincial bus transportation companies systems. We were able to identify the processes, structure, and where the main problem areas lie. After this was completed, we had learned enough to design and create a fully integrated transportation system.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We have received interest from national transportation companies as to how our system could solve their problems. We will therefore be meeting with national and provincial transportation companies upon our return to South Africa. Should we implement our system successfully in our country, it could serve as the template transportation solution for many of the African nations. In this way we could help developing nations improve their use of precious resources through improved efficiency within the public transportation sector.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are most looking forward to seeing what unique plans other like-minded people have devised in order to solve environmental issues and to improve resource usage. We are also very excited about experiencing the diverse cultures which will be united at this single event. The worldwide finals is a dream come true and an opportunity, in some small way, to instill the world's faith in the African continent. We are also all looking forward to meeting Bill Gates in person and having photographs to take home to show our friends and family!

#### Links to more information

[www.whereismyshuttle.co.za](http://www.whereismyshuttle.co.za)



Spain



## Windows Drive

*Note: Windows Drive is also one of three finalist teams for the Software Design Windows Live Award. For more information on this award please see page 154.*

### Team Members

Hector Juan  
David Rodriguez  
Carlos Junquera  
Miguel Llopis

**Title of Project** Windows Drive

### Project Overview

One of the biggest causes of climate change is the production of CO<sub>2</sub> through the use of private vehicles. Our solution is to leverage the power of Windows Live Services and transform Windows Live in a social network able to save the environment. We combine existing services (Messenger, Maps, Search, Contacts, Alerts, Agents, and MSN Activities) with custom ones in order to build a platform that allows us to share rides with our MSN contacts and others in a certain range (i.e. contacts of our contacts). Our target users are the more than 420 million people who use Windows Live every month, with only one requirement: that they connect to the Internet through a Windows Live account.

What can users do with our platform?

- Create routes directly on Windows Live Maps
- Search for existing routes that match their needs
- Connect with their contacts to share details of different routes
- Receive alerts about new routes, new contacts, next routes scheduled reminders.

### Technology/Software Used

- SQL Server 2008
- LINQ
- Windows Communication Foundation
- Web Services
- Windows Presentation Foundation
- XNA
- J2ME (Java Middleware Platform for Mobile Devices)
- ASP.NET Ajax
- Silverlight 2.0
- .NET Compact Framework 3.5
- Windows Mobile 6
- Windows Live APIs (Virtual Earth, Contacts, Alerts, IM, Live ID)
- Windows Media® Center
- Visual Studio Team System 2008
- Expression Studio 2.0

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

The Microsoft Imagine Cup is a big challenge for innovative students worldwide. You can make your ideas become real. As computer science students, we are passionate about the software industry and how software can change aspects of our lives.

Also, because the purpose of our project is to build a worldwide carpooling network through Windows Live, it is very important to enter the Imagine Cup and show it to the rest of the world.

**What has been your favorite part of the Imagine Cup competition thus far?**

Enthusiasm. That is what all the students participating in the Imagine Cup, not just in the Software Design invitational but in all categories, have in common. Enthusiasm about technology, enthusiasm about cultural exchange. At the end, enthusiasm to build a better world together. Because of that enthusiasm, each round we have overcome, each obstacle we have gotten through, we have realized our own possibilities to work as a team to get cool things done.

To sum up: our favorite parts of the Imagine Cup thus far are enthusiasm about the competition in ourselves and other competitors we have met along the way to the final round, the Cultural diversity we will find in Paris, and the team spirit we have developed to become stronger as the challenge becomes bigger.

**How did you come up with your idea?**

Once we identified a potential environmental problem (climate change), and one of its main causes in our daily lives (use of private cars), we thought about possible ways to approach it, trying to maximize the impact of our solution.

In the current software industry market we are seeing a gradual evolution from desktop-centered solutions to "in the cloud" solutions and different paradigms in the same line (SOA, Software plus Services.). In addition, social networking is growing more relevant. Our project tries to combine both in an effective way to solve an existing problem.

After performing market research, we found several existing solutions. However, we developed a strategy that gives our solution five clear software-market advantages compared to existing solutions:

- Integration with social networks in a visible way
- Growth possibilities
- Users' security and privacy
- Rich user experience
- Multiplatform and interoperability
- Better search engines in our business logic layer

To meet all these requirements, we are using newest Microsoft technologies, as mentioned above.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

We will be launching our project before the Imagine Cup finals in France. Our business model is based on Windows Live business model concepts: free services to end users and third-party advertising in very different ways.

As we said before, our target audience is worldwide since this problem affects the daily lives of people all over the world. Our potential users are the 420-plus million of Windows Live users.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We are looking forward to meeting lots of students from different countries that feel the same passion about technology that we feel. We also are looking forward to learning from different cultures and having a great time with everyone involved in the Imagine Cup in France.

In addition, we will be carrying a whole nation with us, so we are looking forward to being good representatives of Spain. And, finally, we have an important message for the rest of the teams and countries: Through technology, we can be one world, dreaming the same dream... cheers from Spain!

**Links to more information**

Project Web site: [www.windowsdrive.es](http://www.windowsdrive.es)



## Sri Lanka



### Sasrutha

#### Team Members

Sapumal Ahangama  
Chethiya Abeysinghe  
Supunmali Ahangama  
Dasuni Kannangara

#### Mentor

Thinesh Thusinthaka  
Hewapathiranna

**Title of Project** Haritha Prayathna ("An Effort for a Greener World")

#### Project Overview

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" is the theme statement of the Division for Sustainable Development in the United Nations. Thus, at the World Summit on Sustainable Development in 2002, governments affirmed the importance of solid waste management in maintaining the quality of the Earth's environment and it was decided to give priority attention to the reuse and recycling of solid waste, in addition to waste prevention and minimization. In many countries, these efforts fail due to lack of cooperation from the public.

In our project, we try to popularize and encourage the public to maximize environmentally sound waste reuse and recycling through involvement of primary school children. We believe that the most effective mode of educating adults is through their children. The enthusiasm of school children in reuse and recycling of solid waste will be generated by introducing them to a computer-based network system and by rewarding them substantially.

Through the system, students will be encouraged to maintain waste collecting bins in their homes. The waste collection staff can view the bin levels and locations of those bins. The earnings from selling waste collected by individual students will be deposited in their savings accounts and premium points will be given according to the amount of waste collected and sold, and students will get discounts to purchase school items based on their premium points. Also, the system will guide students on water and energy savings and the system will provide important information to users such as researchers, government ministries, and environmental organizations. Through our software, we try to make recycling convenient and easy, by offering financial incentives and by public education.

Our project is primarily for young students, for whom the environment is both an inheritance right and a future challenge. Our aim is to foster in them an attitude of personal responsibility to the proper management and protection of our environment and to inspire and motivate elders through them.

#### Technology/Software Used

- XML Web Service
- .NET Framework
- Visual Studio
- Mobile device
- .NET Compact Framework
- ASP.NET
- SQL Server

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

Some of us had the opportunity to attend the Microsoft Imagine Cup finalist presentations in Colombo, Sri Lanka in 2006 and 2007 and we realized the value of participating in competitions of that nature. We were impressed by the way the Imagine Cup competition helps to improve and show the talents of youth in the field of computer technology while addressing an issue of global importance. So we felt that this competition, while paving the way to improve our capabilities in developing a software application through trial and error, also helps to foster in youth positive attitudes towards solving global problems.

**What has been your favorite part of the Imagine Cup competition thus far?**

Our favorite part of the Imagine Cup competition so far is the process of developing the software as a team, working day and night. It was fun and thrilling to try out various cutting-edge technologies fitting into our application and disturbing colleagues even at the middle of night asking for clarification of doubts. While failures gave us headaches, ultimate solutions through trial and error gave us the utmost satisfaction.

**How did you come up with your idea?**

We feel that the most serious and visible problem threatening the quality of the environment is the accumulation of un-degradable solid waste around us. It is annoying to observe the disregard of people, especially adults, towards this problem and we felt this was a good opportunity if we could develop a software solution capable of inducing people to develop positive attitudes towards protecting the environment.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

In Sri Lanka, the government is investing billions in solid waste management. But they have not been able to meet their expectations. We think that our system will be a good solution for them to encourage school children and adults to manage solid waste. As we have developed the system with the aim of implementing it in schools, with the contribution of the ministries and various environmental organizations, we hope to encourage the government and these environmental organizations to implement this at the school level. Through it, we plan to start implementing the system as a new business where we can sell it to other countries and other organizations.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We look forward to getting to know our fellow students from other countries and to build new friendships to work as a global team toward this noble task of protecting the environment. Getting acquainted with them will undoubtedly help us in furthering our knowledge and capabilities. We shall be very glad if we are given the opportunity to witness the presentations of all the participating teams. Last but not least, we are looking forward to experiencing the beauty of the great city of Paris and getting acquainted with the rich culture and people of France.





Taiwan



## Environmental Soldiers

Team Members

Huai-Lei Fu  
Kai-Hsiang Hu  
Ting-Yu Wang  
Zih-Chi Lin

Mentor  
Phone Lin

**Title of Project** APS: Distributed Automatic Air Pollution Sensing System

### Project Overview

In APS, lightweight, small air pollution sensors are widely attached to any kind of object in our living environment, such as a building, a car, or the safety helmets of bicycle riders. The information gathered by the sensors is fed back to central monitoring stations through existing mobile networks. The air quality of a specific LA (Location Area) is shown on the Web map, providing a healthy pathway that users can use to avoid traveling through the areas of air pollution with high concentration. In addition, for people carrying a GPS mobile device, APS will proactively issue a warning message if the air quality of the area is bad.

### Technology/Software Used

- GPS
- Bluetooth
- SMS Service
- Expert System,
- Web Services
- Visual Studio 2008
- SQL Server 2005
- Silverlight

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Our enthusiasm to solve a serious environmental problem and the possibility of seeing Paris inspired us to join the Imagine Cup. It's really a great opportunity to learn the process of identifying a serious problem, proposing an innovative solution, implementing the solution, and finally recommending our creation to others. The Software Design invitational integrates each of these steps very well. Therefore, we decided that Software Design was the best choice for us to realize our idea.

### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the Imagine Cup so far is the process of the regional finals. The whole competition proceeded in an exciting and funny atmosphere. It was really cool to compete with the other four strong teams. The most creative ideas in Taiwan were expressed by wonderful presentations and shows. The passion and enthusiasm within each team was moving. And we can't forget how excited and honored we were when we won the finals in Taiwan.

### How did you come up with your idea?

We observed the traffic patterns on the streets. We figured out that scooters are the most popular conveyances in Taiwan. They are one of the arch-criminals of air pollution, and these riders are unfortunately seriously exposed to polluted air. Therefore, we considered using the power of technology to do something for the environment. That's how we started to come up with our idea.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We will extend our system to a more powerful and robust system to provide a reliable service to the users. We will continuously refine our work, because we believe our system could help people to avoid entering polluted areas and provide a formulation for urban planning. In the future, we believe APS will be widely accepted by people. On that day, we will make it into a business.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to creating a good memory for our whole life. This game impresses us so much. Our greatest desire and purpose is to earn glory for our home town and for Taiwan. Showing APS to the world, meeting competitors from other places, and enjoying the exciting contest are what we want to experience.



## Thailand



### SKE

Team Members  
 Udomsak Donkhampai  
 Tanthwat Khemavast  
 Saroot Udomkarn  
 Krithee Sirisith

**Title of Project** Windows Light

#### Project Overview

The greenhouse effect is the main cause of global warming. One of the three major atmospheric contributors to the greenhouse effect is the increase in the concentration of carbon dioxide. Lighting accounts for nearly 20 percent of the average home's electric bill, that is, it contributes the most emission of carbon in a typical household. When we turn off 1 billion light bulbs an hour, we can save 717,696 trees. Windows Light is an application that has an innovative process and provides an important key to help people to protect the world.

There are several main functions. First, it monitors the pollution created by light bulb usage and the amount of carbon dioxide in households to create an awareness of the carbon dioxide emission (or carbon footprint). Then, it reduces light bulb usage by automatically adjusting the light bulb brightness to the appropriate level when people use too much lighting or by turning off lights when no one is in the room. Finally, it suggests solutions to reduce your energy usage at home as well.

#### Technology/Software Used

- .NET Framework 3.0
- Visual Studio Standard Edition
- Web services
- Windows SDK
- Windows Presentation Foundation
- Virtual Earth
- Carbon footprint calculation
- Carbon offset technology

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We entered to get new experiences and see other teams' work. We choose Software Design because it's the biggest event and we wanted to test out the knowledge we had gained through our studies in software design.

#### What has been your favorite part of the Imagine Cup competition thus far?

Meeting other teams, seeing what they are doing and discussing their projects with them.

#### How did you come up with your idea?

We wanted to design our software that can be used in many areas and many countries. So we ended up thinking about light bulbs because almost every house uses electricity. If we can optimize the usage of the light bulb it will save energy and we can apply this to other electric equipment.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We plan to look around Paris and come back to study at our university. We don't have plans to launch a business; we need more observation for marketing.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to meeting other teams from various countries and seeing the best ideas in the world for using technology to enable a sustainable environment.



Tunisia



## WHAMTun

Team Members

Ahmed Triki  
Marwa Nasfi  
Mohamed Heni Najar  
Wadii Jadoui

Mentor

Hatem Haddad

**Title of Project** MondeParfait

### Project Overview

The major solution to save our planet is to educate and to awaken awareness in the next generation for the earth environment's preservation. That's why we choose to target young people, particularly children. Our software, MondeParfait, educates children—in fact, it even trains them, from a young age, to protect the environment. So we are trying to make the environment's information accessible to children and to sensitize them to the preservation and respect for nature.

MondeParfait is a space in which the child can be able to learn and play. It's accessible through normal PCs, PDAs, and phones to guarantee that it makes a permanent impact on children.

### Technology/Software Used

- ASP.NET
- Microsoft Office SharePoint Server 2007
- Silverlight 2
- SQL Server 2005
- Visual Studio 2008 Professional Edition

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The Imagine Cup is the world's premier technology competition, so as IT students, it is a big honor to be a part of it, especially the Software Design competition because it's giving us the opportunity to help future generations have a healthy planet.

### What has been your favorite part of the Imagine Cup competition thus far?

The semi-finals results announcement is our favorite part of the Imagine Cup competition so far, but we are sure that our visit to Paris will be the most exciting part.

### How did you come up with your idea?

We think that the climatic changes, the global warming, the pollution problems, and other factors are a demonstration of the earth's bad management, so we tried to find a solution to save our planet. We found out that the best action is to educate next generations for the earth environment's preservation.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

MondeParfait is an international solution because it targets children from all over the world. That's why we will continue developing it. We will make sure that it's accessible to all children, without distinction of their country, ethnic, or religion. We believe that the environment's preservation is a major problem for all humans.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

Scientifically, we think that our visit to Paris will be an advantageous experience since the finals will be the meeting of the world's best students to debate and share Microsoft technology experiences.

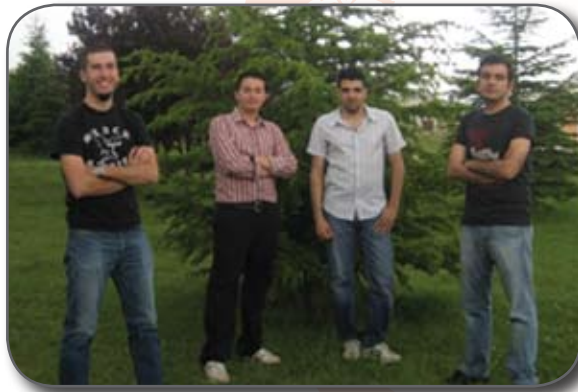
Culturally, we will meet people from all over the world to talk about the main problem nowadays, which is our planet and our environment.

### Links to more information

[mondeparfait.wordpress.com](http://mondeparfait.wordpress.com)



Turkey



## L'orientalis

Team Members

Deniz Şen  
Engin Kızıl  
Semih Balkancı  
Yusuf Avcı

Mentor

Alper Kamil Demir

**Title of Project** L'orientalis

### Project Overview

We all know that our world is facing a global environmental crisis nowadays. There are lots of causes of global warming and the best way to avoid them is to build forests.

Forests provide ecological balance by producing O<sub>2</sub> and consuming CO<sub>2</sub>. They moderate temperature and rainfall. Also, they provide us with important products including food, medicine, shelter, and warmth.

Our goal is to encourage people to plant trees by showing them an easy way to increase the number of trees. With the use and help of L'orientalis, people will be able to choose a spot on a map and will plant trees that include their names and their information. They will also see the photos of their trees and be able to share their information with people all over the world. With features customized for companies and groups, there are multiple planting options, and people are able to create their own forests. Thus, companies have chance of becoming pioneers for others by showing their logos and their names on their trees. Also there is a Treepedia section in our project that gives people information about trees and gives people the ability to add their custom images and videos.

So willingly, we believe that there is a bright future leading towards us and we are celebrating it with the trees that we plant.

### Technology/Software Used

- .NET Framework 3.5
- C#
- Expression Blend 2.5
- Expression Design
- LINQ
- Silverlight 2 Beta 1
- SQL Server 2005
- Virtual Earth
- Visual Studio 2008
- Windows Communication Foundation Services
- XML Web services

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

Considering the following quote from Bill Gates, one can tell that this is no ordinary "student software competition":

*"I wish there had been an Imagine Cup when I was growing up. It gets people involved in seeing that software is changing the world."*

Despite his bad luck, we have the chance to enter this competition. ☺ And now we are so glad to see that software is changing the world.

**What has been your favorite part of the Imagine Cup competition thus far?**

We think that it is a great time for all competitors from all over the world to present their hard work and innovative projects for solving global problems. It's a big show that everyone has to be a part of.

**How did you come up with your idea?**

During our research, we were aiming to decrease the negative effects that harm the environment. We actually observed that the number of trees that give us life, space, and oxygen to breath were decreasing very fast. Nevertheless, we found there are not enough efforts being made to gain them back. We concluded that we need support from everybody to regain every piece of forest we have lost so far. This idea came up when we considered how we could get people's attention and gain their support by using the most efficient means.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

Our project, L'orientalis, makes people gain social consciousness and responsibility over the Web, brings them together, lets them donate for tree planting in an interactive, entertaining, visual, and encouraging way. After our project becomes alive, the whole world will be seeing the creation process of new forests and support these beneficial acts with our hopeful platform. People who make donations will be able to see the results of their support, and this will be an impressive start for all.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We are most looking forward to being part of the best projects about a sustainable environment. The most exciting part is going to be meeting people from all over the world and sharing this project. Having the chance to meet other students who are also eager to make our environment sustainable is also a great experience.

**Links to more information**

<http://www.lorientalis.org>



## Uganda | East and Southern Africa



### Native Green

#### Team Members

Sagini Wycliffe  
Musoke David  
Okori Ivan  
Kasolo Joseph

#### Mentor

Mr. Batugwa Frank Tumusiime

**Title of Project** The Native Green Project

#### Project Overview

Our project is basically a system to effectively reach the public and sensitize people about various environmental safety measures. We enhance the discussions online. Our solution uses technology for both phones and radios, so it reaches all rural and urban dwellers. Current systems of reaching out to the public, such as placing posters in public places, do not reach the public well.

#### System components:

- Database
- SMS gateway
- Phone
- Internet information Server (IIS)

Users send views on a particular environmental topic through their phones, and the text messages are displayed in the system chronologically. A user can send a text message to a particular person, and the addition to the discussion is received by everyone on the discussion. Radio stations can air the program, and the rural population can access the discussion and information presented. Our system is very appealing and far more effective in reaching a wide population than current systems.

#### Technology/Software Used

- Bluetooth
- Visual Basic® .NET in Visual Studio
- Microsoft Office
- SQL Server

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The prizes attached and the various categories of the project competition. We aspired to go abroad and we love using Microsoft software. Above all, we want to impress Microsoft and win scholarships, if available, to further our education as young ICT students. We found the user interface of ASP.NET and Visual Studio to be very friendly and dynamic, and that made it easy to do or implement whatever we wanted. This enables us as developers to build other software on many applications and Web sites.

#### What has been your favorite part of the Imagine Cup competition thus far?

Sharing Ideas with other international students and exchanging ideas on their projects. Likewise, the scrutiny of our project is challenging. We highly regard the advice we've received from judges along the way.

#### How did you come up with your idea?

We read the theme and started analyzing the current problem of environmental sensitization techniques. Since we were very familiar with the SMS technology and radio systems, we thought this might be the best fit for our knowledge in Visual Basic Studio. Moreover, access and using this technology is inexpensive for people all over the world.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We plan to finish our Computer Science degrees next year (if our financial constraints are solved in time). We hope to further develop other dynamic Web-based applications and to enter a master's program in the study of software design and engineering.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

Winning is our MAJOR goal, and we feel we can better show our skills to the world. We're also looking forward to sharing our programming skills with various students, viewing different applications from Microsoft, learning how to use them. Lastly, we're hoping to be recruited into Microsoft as a software developer or designer.



## Ukraine



### Best Future

#### Team Members

Paul Podlipensky  
Andrei Gordiyenko  
Ievgen Kovalov  
Alexander Dubrovsky

#### Mentor

Viktor Kauk

**Title of Project** Mobalas

#### Project Overview

Our world is getting more and more complex day by day. Every person needs to make lots of decisions that sometimes influence others. And in today's world, it's especially important to know where and what kind of trouble or disaster is taking place in real-time and act quickly to prevent damage to the environment. Having a mobile device, which is actually a multifunctional computer bound with a GPS navigator, camera and standard cellular phone functionality is a common trend nowadays. To create a solid connection between a mobile device and Internet services is the main Mobalas project goal. With the help of our project, anyone can take part in solving the problems happening around us. Each person can evolve from an ordinary observer—sending all available data to the server, which can be sold to the news agencies later if the information is topical—to the active volunteer, a person who gets directions about where and how he can be useful and what he should do in the next moment.

Using geographical maps along with modern multimedia technology enables us to manage real-time observations of any place that user is interested in and this provides people with up-to-date information about the world around them.

#### Technology/Software Used

- .NET Framework 3.5
- AJAX
- ASP.NET
- LINQ
- .NET Compact Framework
- SQL Server 2008
- Silverlight 2
- Virtual Earth
- Visual Studio 2008

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Taking on a big challenge, outstanding inventive teamwork, real-world project development, and cutting-edge-technologies implementation experience are major among lots of different factors influencing our decision to take part in the Imagine Cup. The choice of the Software Design invitational was obvious because only this area gives us the opportunity to implement our innovative ideas and develop them into a full-scale end product that would be useful to many people even after the contest ends.

#### What has been your favorite part of the Imagine Cup competition thus far?

Sharing our own ideas and hearing how many other great projects are around is our favorite part. We also like learning and using the latest Microsoft technologies, getting feedback on what we do, and knowing that our ideas may bring something new and introduce positive changes to the society.

#### How did you come up with your idea?

The starting point for us was the discovery of how much potential modern widely used mobile devices hold. Immense amount of memory, powerful processors, wide range of connectivity options, multi-megapixel photo and video cameras, and all of these barely make a good use for an average device owner. Mobalas emerged from a combination of this handheld device potential and the multimedia capabilities of today's Web (something all of the team members have been keen on). In general, we started from available possibilities and then connected it with the current need for a more information-wise integrated environment.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

The project is being developed with the business prospects in mind. The core platform we are developing may find application in large numbers of areas from making news to police patrolling—almost anywhere where people exchange information from different locations! Local environmental applications are the most obvious since it is so very important to know where and what kind of trouble or disaster is occurring so as to take action in time and prevent damage to the environment. Thus, we are primarily aimed at platform integration options but also are considering development of a subscription service. We are going to look for business opportunities starting at the Imagine Cup World Finals.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are quite excited about this exceptional opportunity to meet new friends, find new ideas, and challenge some of the smartest students across the globe! We are also looking forward for the Imagine Cup as a great kickoff for our project.

#### Links to more information

[www.mobalas.com](http://www.mobalas.com)



## Innovators

Team Members  
Ahmed Wasfy  
Ammar A. Sawas  
Syed Zahidi

Mentor  
Dr. Fadi Aloul

**Title of Project** PolluMap, Pollution Mapper for Urban Cities

### Project Overview

The purpose of this project is to develop an automated system to enable the supervision of air quality in urban cities and communities. The project involves using a set of mobile sensors that keep track of different pollutants' levels across the city. The sensing units are responsible for continuously (i) measuring the pollution data, (ii) recording the date, time, and location of the readings using a GPS unit, and (iii) transferring it through GPRS/GSM technology to a mapping server. The readings can also be manually downloaded to avoid GPRS/GSM costs. The mapping server integrates the collected data and the pollution history to plot by using Virtual Earth and a pollution map of the city using its Geographical Information System (GIS) database. The system provides detailed information about the history of the pollution and the major pollutants' levels at different places across the city along with a prediction of the level of these pollutants in the future. Mounting this information on Web services will provide an updated source of information about pollution across the city to the end user.

The system can be described as a computer-based system that measures the level of different major air pollutants in a city and plots a handy city pollution map online along with time. This provides a DEP triangle, Detection, Enhancement, and Protection. The system helps both citizens and governments be aware of the pollution levels in their cities and pushes them to work together on solving environmental issues, thus making it everyone's problem not just the government's. The system builds a historical view of pollution data across the city that will help the detection of any unusual or hazardous environmental change. The continuous monitoring will lead to the enhancement of the green acts and will trigger the appropriate act to protect the endangered areas. Such a system will attract a number of tourists and investors to the cities' green areas along with improving real estate values. In other words, the system brings the city pollution to the surface and to a higher priority helping the city provide a healthier environment to people from all age groups.

PolluMap extends the urban pollution issue to a new dimension that widens the environmental responsibility to all citizens along with the government. PolluMap proposes an easy-to-understand interface to the end user that operates on a fully automated platform. It can be easily configured to run in any country and it is easy to implement as long as you have a vehicle moving all over the city (the system is mounted on top of an authentic vehicle, e.g. municipality car or public transportation bus). PolluMap is cheap and feasible because the whole system won't cost more than \$1,000 USD. Furthermore, it will replace a large number of expensive stationary monitoring units.

### Technology/Software Used

- 68HC12 Motorola microcontroller
- CO sensor
- GPS unit
- GSM modem
- Microsoft eMbedded Visual C++®
- NO2 sensor
- SQL Server
- Temperature sensor (circuit)
- Virtual Earth virtual maps
- Visual Studio .NET 2008

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?**

We wanted to create real world, dynamic, powerful software solutions using Microsoft tools and technology that will have significant impact on the society. Also, we wanted to demonstrate innovation on the .NET Framework and the Microsoft Windows platform because they conceive, test, and build applications that can change the world for the better.

**What has been your favorite part of the Imagine Cup competition thus far?**

Our favorite part was meeting new people and being exposed to innovative ideas that would help in making the world a much better place to live in. The exposure to the many and varied solutions influenced us in approaching problems in different ways and methods.

**How did you come up with your idea?**

The idea was developed after hours of brainstorming with our advisor, Dr. Fadi Aloul. Our goal was to come up with a simple, yet effective, idea. We believe that our solution is small, cheap, and easy to use, yet can make a significant impact on the nation (e.g. anyone that has access to an Internet browser can view the data from anywhere at any time).

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

We are currently in the process of talking to our local government to sponsor the idea and implement it in the city of Dubai. We have also been approached by several investors who are interested in taking our innovative idea into the world.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

Exposure, excitement, and challenge. We want to meet professionals from all over the world and understand and appreciate their solutions that will help in making the world a better place to live in, and of course we want to WIN.

### Links to more information

- [www.gulf-news.com/notes/Students/10213929.html](http://www.gulf-news.com/notes/Students/10213929.html)
- [www.xpress4me.com/news/uae/dubai/20007418.html](http://www.xpress4me.com/news/uae/dubai/20007418.html)



## United Kingdom



### ResolveEvolveSolve

Team Members  
Dominic Green  
Ben Nunney

Mentor  
Tom Randell

#### Title of Project EnviroMatch

##### Project Overview

Not a week goes by without the words going green or carbon footprint appearing in the media. In today's green-aware society, environmental issues are hot topics in both the press and politics. It's no secret that there's a lack of education around how individuals can not only affect future environment change, but also how they can adapt to current environmental concerns. Enter EnviroMatch, enabling education from an early age, helping to empower young people to commit to combating, and adapting to climate change both now and in the future.

Through our suite of interactive mini-games, we aim to enable children to adapt to current and emerging environmental situations the world over. It's not all about educating young people in what they can do here and now—EnviroMatch is instilling ethical consideration in children that will not only help the environment now, but also in the future. If just a small number of the children pass on the knowledge that they gain through EnviroMatch to their family or peers, this will reach out to a wider audience and further increase the impact of the application.

Not only is EnviroMatch a great idea, but its range of uniquely implemented services and minimal start-up costs make it a strong and marketable product. EnviroMatch is delivered to the user as a rich Internet application, using cutting-edge versions of Silverlight and Windows Communication Foundation Web services.

Although the end users of EnviroMatch are secondary school students, our target market is the local educational authorities (LEAs). EnviroMatch is completely skinnable, so any school or LEA can have their own customized branding as part of the package. The product is also an ideal product for companies looking to improve their *green credentials*, by using the targeted pay-per-click advertising within the application to their advantage.

##### Technology/Software Used

- .NET Framework 3.5
- C#
- Expression Blend 2.5 (March 2008 Preview)
- Expression Design
- Facebook API
- LINQ
- Silverlight 2 Beta 1
- SQL Server 2005
- Visual Studio 2008 Team Suite

- Windows Communication Foundation
- XAML

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

We are both passionate about technology and about imagining ways to both innovate and adapt existing solutions to new and exciting scenarios. As Microsoft Student Partners (MSPs), we have had an amazing chance to evangelize and implement these solutions as well as learn new skills and gain a unique understanding of how technology can work as a business. The Imagine Cup seemed an ideal way to further these skills, whilst also enabling us to address environmental issues that we both feel strongly about.

Heralding from different backgrounds, we both saw the opportunity to learn new skills not only from Microsoft and our mentor, but from each other, giving us both an excellent overview as to how the individual components of a system both work and can be implemented together. Lastly, we both saw an amazing opportunity to make a difference both to our own lives and the lives of others around the globe through imagining new solutions for a worthy cause.

##### What has been your favorite part of the Imagine Cup competition thus far?

The Imagine Cup has been an amazing experience at every turn and so picking out a favorite experience is a difficult task. One of the best experiences we have had so far has been the Innovation Accelerator event held at the Microsoft Reading Campus. This event was an amazing opportunity to connect with Microsoft, our mentor, and the other teams competing in this invitational all in one place, giving us the chance to share ideas, gain new presentation and business skills, and network with potential business partners.

##### How did you come up with your idea?

There are so many aspects of environmental sustainability, ranging from innovative new hardware to complex software solutions. One of the key areas we felt that can strongly affect climate change was education, so we set about researching products currently available or in development. What we found was a niche in the market. As we began brainstorming ideas, knowledge from our varied backgrounds in both education and technology gave way to a solid software design idea. Events such as the Innovation Accelerator further developed this into a viable business solution, giving us what we feel is a very marketable product.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We have both worked hard on our respective career prospects over the last 12 months and are equally excited to be embarking on very different career paths. In spite of this, we still see EnviroMatch as both a fantastic idea and amazing business opportunity. We fully intend to continue developing our business plan and forging links with companies such as Microsoft and the local education authorities. With careers in both coding and in education, we will be ideally placed to further the reach of the product in terms of both usability and suitability to the end user.

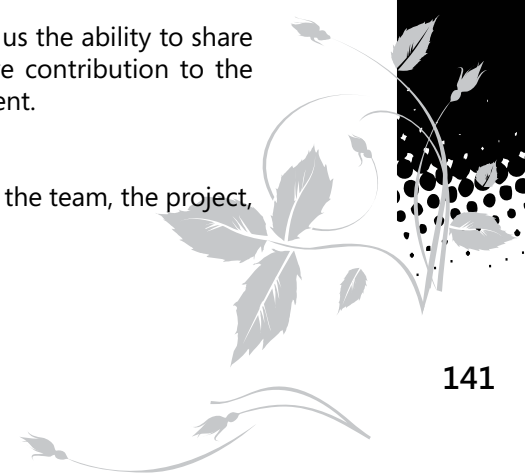
##### What are you most looking forward to experiencing at the Worldwide Finals in France?

The worldwide finals will be an amazing opportunity to meet teams from other countries, exchange knowledge and ideas with them, and learn about how differences in culture around the world have impacted on this year's Imagine Cup brief.

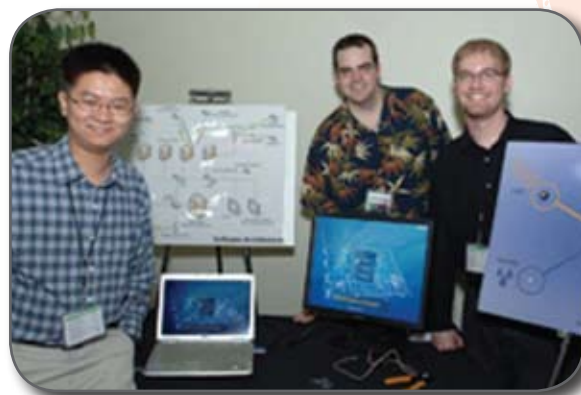
We are also looking forward to presenting our entry on a world stage, giving us the ability to share our passion with countless other individuals, and helping to make a positive contribution to the international effort of both adapting to and positively affecting the environment.

##### Links to more information

Visit our Web site at [www.resolveevolvesolve.com](http://www.resolveevolvesolve.com) for more information about the team, the project, and how EnviroMatch is progressing.







## Sparx

Team Members  
Adam Risi  
Zachery Shivers  
Ziyang Zhou

### Title of Project    Reactivity Sensor Network

#### Project Overview

Reactivity Sensor Network provides home, enterprise, and city-level networking of sensor and device control systems. It uses Windows Communication Foundation to coordinate sensor devices placed inside constructions. On one hand, different kinds of data, such as temperature, humidity, luminosity, AC current, sound, carbon dioxide and monoxide, and motion, are being collected and processed through Reactivity servers and reported to users. On the other hand, commands can be generated and pushed back to devices to control anything from air conditioners, computers, or even just AC power lines. The network can be configured and programmed using customized rules. Different actions can be scheduled to happen once certain environmental conditions are met in the targeted environment. SQL Server would be used to store sensor position and configuration information as well as sensor data for future study and analysis. Mobile phone users would be able to access sensor data as well as control environment remotely through a .NET-connected device application developed on .NET Compact Framework.

#### Technology/Software Used

- .NET Compact Framework
- .NET Framework 3.5
- ASP.NET
- SQL Server 2005
- Windows Communication Foundation
- Windows Presentation Foundation

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

The Imagine Cup is a fun and challenging competition. We believe that the chance to travel around the world and meet brilliant students from almost 60 different countries is enough reason for joining this competition. Our involvement with software design let us approach a huge problem and provide an excellent solution. We regard Software Design as one of the most important categories. It provides the best competition and the most competitors.

#### What has been your favorite part of the Imagine Cup competition thus far?

In short, the national final in Los Angeles is our favorite. We had the opportunity (and took it!) to work with excellent leaders in both the business sector and the academic sector. We were able to make great life-long contacts and help build an understanding of what it takes to be competitive in the software market.

#### How did you come up with your idea?

We did some brainstorming sessions and brought up many potential ideas and projects that we've been looking forward to developing. After all of the chaff was tossed, we were left with some really great ideas. A sensor network won out in the end because it was a great balance of feasibility as a project and originality as an idea.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Nothing is for sure yet. We might be able to take our project to the next level by launching a new business. Or, we might continue to refine our idea and research in the area, taking our project to the next level from a technological perspective.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to meeting all the contestants, of course! We've been longing to make friends with other young creators from around the world. Getting the chance to meet the competition is great.

#### Links to more information

##### Web sites:

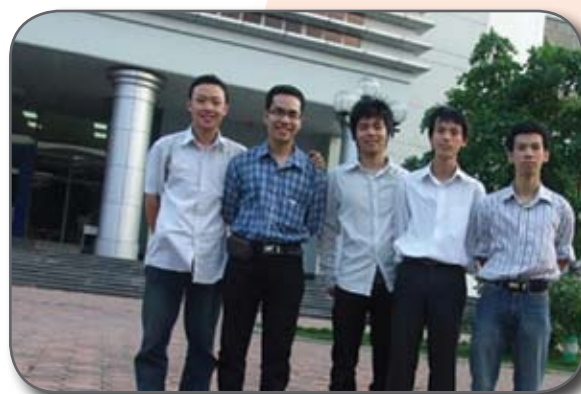
[www.sparxlive.com](http://www.sparxlive.com)  
[www.reac.tivity.org](http://www.reac.tivity.org)

##### Blog:

[blog.sparxlive.com](http://blog.sparxlive.com)



## Vietnam



### BK Milestone

#### Team Members

Ta Quang Dung  
Phan Hai Linh  
Vu Hong Linh  
Nguyen Minh Chau

#### Mentor

Hoang Anh Viet

**Title of Project** Automatic System of Buying, Classifying and Managing Solid Garbage in Community

#### Project Overview

The project idea started from these thoughts:

- Garbage can bring money to people.
- It's important to classify garbage at its source.
- Requiring enterprises to pay money to communities if their input is recycled garbage.
- The government can cut down costs regarding garbage.
- The work of environmentalists is simplified thanks to the use of information technology software.

We believe that the current problem of careless disposal can be eliminated if people sell their garbage to this automatic system and take the money. Their account will increase gradually with the money they earn from selling garbage every month, where before they had to pay the garbage service company.

In addition, this system provides great social benefits and convenience. All sectors of residents, especially poor children, can collect tin cans, plastic bags, paper, or whenever they see on the street, put it in the system, and exchange it for necessities like water or bread. And after that, water bottles and plastic bags can bring money to them again. This system is a complete circle.

#### Action principle:

People give their garbage to clients. Clients will classify garbage at the source into folders, and later calculate and pay back to the people. There are several ways to formally accept payment: cash, a number of simple checking account roll-ins, through e-commerce technology, or by exchanging products such as mineral water, soda, cake, etc.

Clients will send their information to a server that is set up as an application processing center and includes information such as the system's garbage mass sum, what mass is and is not classified, reports about garbage situations, autumnal time raked in, financial positions of clients, reporting about the track of the garbage in the overall system, etc.

In addition, the server significantly supports environment managers in terms of statistic garbage reports. There is also a portal enabling enterprises to buy the garbage that is their input materials and resources.

#### Technology/Software Used

- .NET Framework 3.5
- ASP.NET
- Automatic mechanism
- Embedded system
- LINQ
- SQL Server 2005
- Visual Studio 2008
- Web services

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Software Design invitational?

Ever since we were freshman at the Hanoi University of Technology (HUT), we have had a huge passion for Microsoft technologies. We have also had a lot of experience in programming with Microsoft Visual C++ and C# and using Visual Studio, SQL Server 2000, SQL Server 2005, SQL Server 2008, and so on. We have known about the Imagine Cup for many years. We realize that the Imagine Cup has been an interesting technology competition for youth like us. These reasons make us want to take part in the Imagine Cup 2008 competition. In addition, our majors at HUT are software design and we have many achievements in this field. Therefore, we decided to choose the Software Design invitational.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our project has many initial successes and it was wonderful to become the local Vietnamese winner representing Vietnam in the Worldwide Finals in France. Today, software has played an important role in the Information Technology field. People's work is simplified, thanks to the use of software. We are students with a software technology major. We have a lot of ability and deep knowledge in this field. Therefore, our favorite part of the Imagine Cup competition has been Software Design.

#### How did you come up with your idea?

*Automatic System of Buying, Classifying and Managing Solid Garbage in Community* is actually a big idea. It requires a combination of automatic mechanisms, embedded systems, and Information Technology. To make the idea become reality, BK Milestone worked hard for a long time. We researched by visiting garbage processing industry systems so that we could get ideas for solutions applied to our project. We also referred to many ideas of scientists who have erudite knowledge about the environment and computer science.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

After the Imagine Cup finals in France, BK Milestone certainly will continue to develop our product to bring it to reality at Vietnam. Our team members agree that we will use our project to launch a new business because of the reasons of feasibility and economy of the product, which helps the Vietnamese government reduce the status quo of garbage.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

It is a pleasure for BK Milestone to represent Vietnam and to take part in the Worldwide Finals in France. The time in France is a significant opportunity for BK Milestone to share our experience and scientific knowledge with other teams coming from many countries all over the world as well as make good friends. All of us, the other teams and BK Milestone, certainly have excellent solutions that together use technologies to solve mutual problems of the world such as education, pollution, disasters, and so on.





## Software Design Award Teams

Two new Software Design Awards were offered in Imagine Cup 2008: The Interoperability Award and the Windows Live Award. These Awards recognize Software Design Teams who excelled in specialized areas. The Awards were open to all teams worldwide regardless of whether they participated in or won a Local Software Design semi-final. The Finalists were chosen by Interoperability and Windows Live expert judges based at Microsoft Corporate Headquarters in Redmond.



### The Software Design **Interoperability Award**

In this Award we challenged students to design a software solution that leverages out-of-the-box Microsoft technologies and blends them with other technologies to connect people, data, or diverse systems in a new way. The ability to build technical bridges and blend technologies from different vendors has great value in the industry. The experience students gained by participating in this challenge will build important technical skills that are highly valued in the job market. Finalists were selected by Interoperability expert judges from a worldwide pool of applicants. Each of our Finalist teams has demonstrated excellence in the following areas:

- Architectural Design
- Innovation
- Interoperability (accomplished through file formats, protocols, etc. not through an API)
- Overall "Wow!" Factor

**Interoperability by Design**



## Brazil | Interoperability Award Finalist



### Ecologix

*Ecologix is also Brazil's Software Design Finalist Team. See page 38.*

#### Team Members

Carlos Eduardo Rodrigues  
Eduardo Sonnino  
Renato Ferreira  
Roberto Sonnino

#### Title of Project Ecologger

##### Project Overview

Ecologger is an interactive and extendable decision support system that integrates environment-related issues data provided by members of all sectors of society in a worldwide community. The data can be used to optimize decision-making on environmental issues. It is a pervasive solution, accessible in several platforms (such as mobile devices, digital TV, and the Web), that increases users' environmental consciousness, stimulating them to actively participate in the process of achieving a sustainable environment.

##### Technology/Software Used

- .NET Framework 3.5
- ASP.NET AJAX
- WCF Web Services
- Silverlight 1.0
- Silverlight 2 beta 1
- Windows Live ID
- Windows Live Alerts
- Windows Live Messenger
- Virtual Earth SDK v6.1
- Windows Presentation Foundation
- .NET Compact Framework 2.0
- Visual Studio 2008
- SQL Server 2005 Express Edition
- Expression Blend 2.5 March 2008 CTP
- Nintendo Wiimote
- Google Maps
- YouTube
- MSN® Soapbox
- RSS feeds

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interoperability Award?

We've participated in different categories of the Imagine Cup in previous editions of the competition, and we already knew how important the competition is. Besides, we believe this year's theme is very important, considering our country's role in the global environment. We chose the Interoperability Award because we were participating in the Software Design invitational and found this award an interesting challenge to implement in our solution.

#### What innovation are you most proud of in your project?

We're most proud of the level of integration we were able to achieve, both between Microsoft and Non-Microsoft technologies, to provide a consistent and extendable experience, and seamless transition between different technologies.





India | Interoperability Award Finalist



SKAN

Team Members  
 Sameet Singh Khajuria  
 Karun AB  
 Amith George  
 Noel Sequeira

**Title of Project** ENPOWER

**Project Overview**

The average desktop PC wastes over half the power delivered to it! In fact over 30 billion kilowatt-hours of energy is wasted because many of us simply forget to shut down our computers. All this translates into CO2 emissions. Each PC can have such a large impact – now imagine a large network consisting of thousands of PCs in an organization. These are the big culprits.

Managing multiple remote PCs to save power is a huge problem... not an individual PC, but a whole network and doing so opportunistically and smartly is the challenge that ENPOWER tackles.

**Technology/Software Used**

- .NET 2.0 Framework (programming language: C#)
- XML Web Service
- SQL Server 2005
- Windows Management Instrumentation (WMI)
- Active Directory®
- Visual Studio Team System 2008

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interoperability Award?**

The way this competition is structured pushes students to solve real life problems using technology. And this is what inspired us to enter the Microsoft Imagine Cup. We decided we'd conceive an architecture that could handle not only Windows clients on a network, but those of other operating systems as well with minimal modification.

**What innovation are you most proud of in your project?**

The fact that ENPOWER doesn't require the customer/client to be environmentally conscious. It offers the client direct incentive; moreover, this incentive is two-pronged.

- Financial incentive (power bill reduction)
- Corporate social responsibility (reduced emissions, once quantified, can be used by an organization)

This essentially means ENPOWER can make a marked impact straight out of the box.

**How has Interoperability made your entry better?**

Interoperability extends the impact that ENPOWER has; its architecture enables it to control computers with varied operating systems on a network. Think of networks that have not only Windows clients, but Linux clients as well. ENPOWER can optimize power usage on these computers as well.

**What has been your favorite part of the Imagine Cup competition thus far?**

The transition from an idea to a fleshed-out concept to a potential startup has been an amazing ride; fraught with a few obstacles, but one of the best rides we've ever had. We're totally convinced that what awaits us is probably what will be our favorite part of the 2008 Imagine Cup.

**How did you come up with your idea?**

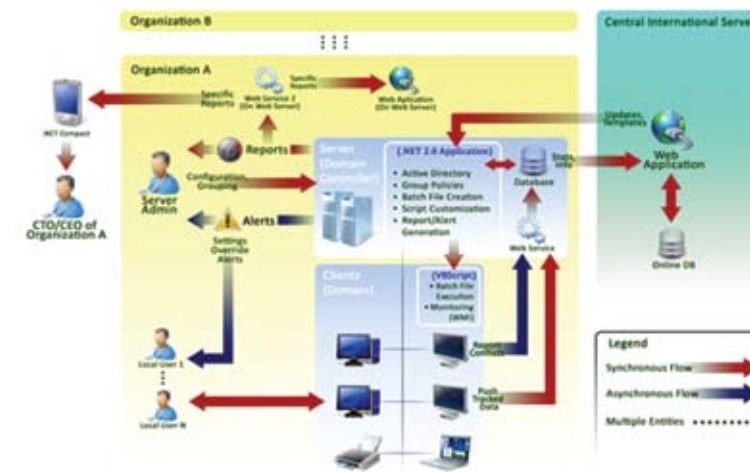
Initially, when we sat down for our brainstorming sessions, we identified that most ideas for software solutions that help the environment required heavy user input. We then started thinking of solutions where we wouldn't have to put the onus of protecting the environment directly on the consumer. "Stimulate change through incentive, not coercion" was our mantra. ENPOWER was born out of this idea.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

We definitely have plans to launch a new business. We are currently working with the Center for Innovation Incubation and Entrepreneurship (CIIE) at IIM Ahmedabad, which is India's premier management institute to develop ENPOWER into a product. We're assessing how we need to go about commercialization, and hopefully we should be up and running within less than a year.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

The EURO 2008 Finals in Austria!!! On a more serious note, getting to see the Eiffel Tower will be surreal. Can't wait to get on that plane! Oh yeah, and the competition too, yeah, we're really looking forward to it.





Poland | Interoperability Award Finalist



## Together

Team Members

Tomasz Nowak

Piotr Sikora

Dariusz Walczak

Marcin Wrzos

**Title of Project** 2GetThere

### Project Overview

The main goal of 2GetThere is to associate people who are travelling in the same direction. Using mobile devices such as widely available mobile phones, allows you to arrange your trip ad hoc without the need to plan long in advance. Such joint journeys decrease the number of cars on the road, and thanks to this the emission of CO2 into the atmosphere is lower. The users of 2GetThere system make their journeys less expensive and at same time they preserve the environment. Finally, our system helps people with similar hobbies and tastes to meet. In a society where communication and social relationships are becoming more and more virtual, such support is really vital.

### Technology/Software Used

- Windows Server 2003
- IIS 6.0
- SQL Server 2005
- .NET Framework 3.5
- LINQ to SQL
- Windows Communication Foundation
- Windows Live ID
- MapPoint Web Service
- Virtual Earth
- ASP.NET with ASP.NET AJAX and ASP.NET MVC Preview 2 extensions
- Visual Studio 2008 Professional
- Sun Java Wireless Toolkit 2.5.2 for CLDC
- Sun Java Standard Edition Development Kit 6u6
- Tigris Subversion 1.4.6
- Molbas Framework from Molbas Team
- J2ME Logger from David Weiss
- Audioscrobbler Taste-O-Meter Web Service (Last.FM)
- Edgewall Software Trac 0.11
- Adobe Photoshop CS2
- Eclipse IDE for Java Developers Europe 3.3.0 with EclipseME plugin 1.7.9

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interoperability Award?

We entered the competition to really change the world. We had to think about a solution where everyone wins, a solution which can be implemented and used by others right away. The "wow" factor and innovation are very important, but it's not enough. We have to deliver our system to people and be sure they will use it. Interoperability was the most important requirement in our system so the choice of category was quite clear. We spent a lot of time designing the server communication model to be suitable for as many platforms as possible. Thanks to common standards we can provide multiple clients like mobile phone application (regardless of the phone's manufacturer), Web application, Windows Vista or Facebook Gadget, or even plug-ins for existing GPS navigation systems.

### What innovation are you most proud of in your project?

**Ad-hoc approach to carpooling:** Until now, carpooling systems allowed us to share only routine, everyday routes and forced us to declare departure time. Our service finds drivers (and passengers) on demand, and doesn't force anybody to wait for transport.

**Mobile phone carpooling application:** Our solution is flexible, it's an "anytime, anywhere" service. It's available on mobile phones, so you can arrange a trip at the gym, at university, after shopping, etc. We look for a match between whole routes based on geographical coordinates. This means that you can ride with someone who starts and stops in different places than you, but who can give you a ride on a part of his route. Now it's easier to find a ride or passenger.

### How has Interoperability made your entry better?

Interoperability allowed us to integrate cutting-edge Microsoft technologies with Java Platform, which is still the most popular platform on cell-phones. Open standards, like GPX, make it easy to integrate with software and devices which already use these standards. Thanks to Windows Communication Foundation Web services we can provide 2GetThere clients on almost all possible platforms, starting with PC and mobile phone, ending on social portals like Facebook or orkut. On the other hand, by using services provided by third-parties, we were able to add very innovative features like integrating with Windows Live and comparing users' music tastes (Last.FM's Taste-O-Meter).

### What has been your favorite part of the Imagine Cup competition thus far?

Thanks to the Imagine Cup experience we had an opportunity to learn new technologies. Of course seeing the name of our team in the World Finalists announcement post on the Imagine Cup News page was our favorite part. We also like the atmosphere of the competition. The Polish division of Microsoft organized some extra training events which were a great opportunity to meet new people.

### How did you come up with your idea?

We came up with the idea on the way to our university. We were walking along a crowded street, when we noticed that in each car there is only one person. All these people were going in the same direction and each of them was driving alone. We noticed some important facts:

- each driver finishes his work at different hours
- drivers don't know each other, they don't have time to look for friends who go in the same direction
- It's hard to find people who start and stop in the exact places as we do

We decided to bring carpooling to the 21st century.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

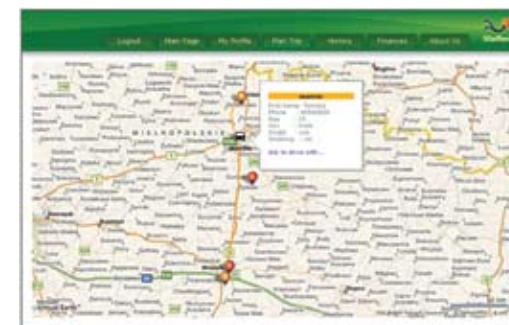
First of all, we would like to run our service and enable people to use it. We've designed a simple and clever business model and started negotiations about possible collaboration with a Polish GPS navigation system vendor. But we want to act globally. Many big cities in the world suffer from traffic jams. Our system can help to change that. We are also looking forward to meeting new people, who might help us with our start-up.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to presenting our solution worldwide and to getting opinions about our project from the judges, guests, and other participants.

### Links to more information

<http://2GetThere.net>





*Software Design Award Teams  
Continued...*

## The Software Design **Windows Live Award**

The Windows Live Award is designed to recognize the software design solution that makes the best use of the Windows Live platform.

The Windows Live platform can enhance software solutions by enabling users to add rich media, communications, community, and mapping to Web-based applications. There are many different ways to integrate the Windows Live platform—APIs (SOAP, REST, etc.) and controls—teams were encouraged to choose the one that best fits their skills and solution. Entries in the Windows Live Award were judged in part on their ability to integrate the capabilities of the platform in an innovative way. Finalists were selected by Windows Live expert judges from a worldwide pool of applicants. Each of our Finalist teams has demonstrated excellence in the following areas:

- Use of Windows Live services
- Elegance
- Innovation
- Clear statement of business motivation



Windows Live™





## China | Windows Live Award Finalist



### Unique Studio

Unique Studio is also China's Software Design Finalist Team. See page 42.

#### Team Members

Jing Pan  
Yang Liu  
Haojian Jin  
Zhou Yan

#### Mentor

Zhifeng Chen

### Title of Project CooTrading

#### Project Overview

Global warming caused by greenhouse gas emissions is one of the most important environmental issues that people need to solve to make the earth a sustainable environment. Although many people know the importance of that, few people know what they can do in their daily life to help protect the environment. In development a solution to reduce them by effective use of energy, renewable energy, economic incentive, and community efforts.

#### Technology/Software Used

- Windows Live
- Visual Studio 2008
- Expression
- .NET Framework 3.5
- SQL Server 2005
- Silverlight 2.0
- ASP.NET
- XML Web Service
- SQL Server Business Intelligence
- Windows Embedded
- Windows Presentation Foundation
- ZigBee 802.15.4

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Windows Live Award?

The Imagine Cup can help us to think of our world in a new vision. The Imagine Cup encourages young people to apply our imagination, our passion, and our creativity to technology innovations that can make a difference in the world – today. Together we can make a difference and have fun during the whole process.

We chose to enter our solution for the Windows Live Award because we had used the Windows Live platform to add rich media, communications, community, and mapping to our Web-based application.

#### What innovation are you most proud of in your project?

CooTrading is a solution to help people better understand greenhouse gas emissions they cause in their daily life and a brand new way to encourage people to reduce their greenhouse gas emissions by effective use of electricity, renewable energy, economic incentives and community efforts with carbon credits. It is acknowledged that there is room for further innovation in order to bring more benefits to each target user and the earth. We hope to see that it is implemented and widely used in the foreseeable future.

#### How has the Windows Live platform made your entry better?

We have chosen to use Windows Live technologies as follows:

- Rich Media: Convenient for target users to get more information.
- Communicate and Stay Connected: Convenient for target users to get real-time information.
- Storage and Sharing: Help to implement the resource share feature.
- Find and Locate: Convenient for users to communicate with each other.
- Authentication: Save time and create possibilities to combine data from different sources in new and innovative ways.







Spain | Windows Live Award Finalist



## Windows Drive

Windows Drive is also Spain's Software Design Finalist Team. For additional information see page 122.

Team Members  
Hector Juan  
David Rodriguez  
Carlos Junquera  
Miguel Llopis

### Title of Project Windows Drive

#### Project Overview

One of the biggest causes of climate change is the production of CO<sub>2</sub> through the use of private vehicles. Our solution is to leverage the power of Windows Live Services and transform Windows Live in a social network able to save the environment. We combine existing services (Messenger, Maps, Search, Contacts, Alerts, Agents, and MSN Activities) with custom ones in order to build a platform that allows us to share rides with our MSN contacts and others in a certain range (i.e. contacts of our contacts). Our target users are the more than 420 million people who use Windows Live every month, with only one requirement: that they connect to the Internet through a Windows Live account.

#### What can users do with our platform?

- Create routes directly on Windows Live Maps
- Search for existing routes that match their needs
- Connect with their contacts to share details of different routes
- Receive alerts about new routes, new contacts, next routes scheduled reminders

#### What innovation are you most proud of in your project?

Perhaps one of the things we are most proud about is that Windows Drive is a feasible project. It has a very little cost to bring it to production, and it allows the users to use it in their actual condition, not needing to buy anything special. An Internet connection and a Windows Live account is enough to use Windows Drive.

#### How has the Windows Live platform made your entry better?

It would be more adequate to say Windows Live Platform has made our entry possible, as it is highly bound to the Windows Live platform and SDK. From the beginning, Windows Drive was designed to take advantage of Windows Live's user scope to expand the range and efficiency of our project. The Windows Live Platform lets us reach a quantity of users we wouldn't have even considered possible to reach without using it. On the other hand, interaction between users is highly enhanced thanks to Windows Live.

Some screenshots of our different clients below:



Desktop application for Windows developed with Windows Presentation Foundation, following the 2007 Microsoft Office system UI design concepts.



Integration with Live Services from WPF, allowing us to create a Web-based core (ASP.NET AJAX) of pages and services them through UI integration (WPF Frame ActiveX Control) and WCF services.



Windows Mobile 6 client, embedding ASP.NET Web pages that show information about user routes and contacts profile.



All these functionalities can be accessed directly from our Web pages, so that we bring all our services to different platforms and operating systems.



And finally, also from MSN Messenger, users can share and create routes as a peer-to-peer service.





## Turkey | Windows Live Award Finalist



### 1stANBUL

Team Members  
Murat Bilici, Can Kayacan

Mentor  
Assistant Professor Feza Buzluca

#### Title of Project i'mParent

##### Project Overview

Imagine a world where the babies, our future, are happier and they have a sustainable living environment and lifestyle—thanks to technology.

i'mParent empowers parents, experts, researchers, non profits, and businesses to align with socially and ecologically inspired values by connecting them to the other parents, experts, resources, and information they need to do so.

We imagine and inspire, activate and support parents in a social environment and we create effective and impactful global solutions for sustainable living and the environment by caring for all people, parents, infants, and the earth. We do this through our solution i'mParent.

Although infants and parental problems are critical for sustainable life in the world, a software solution has not been created yet. i'mParent has innovative approaches for these problems in a new way with technology.

i'mParent aims to solve global problems and offers an innovative tool to communicate, create, disseminate, access, store, and manage information through sustainable living and lifestyle.

##### Technology/Software Used

- Windows Live ID
- Silverlight Streaming
- Messenger
- Virtual Earth
- Microsoft Live Search
- .NET Framework 3.5
- Visual Studio 2008
- SQL Server 2005
- Silverlight
- ASP.NET
- ASP.NET XML Web Service
- AJAX
- ASP.NET AJAX Toolkit
- RSS Toolkit
- Anti XSS

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Windows Live Award?**

We thought that we could make a difference in the world.

**What innovation are you most proud of in your project?**

We turn babies' voices into a comprehensible language to make communication between parents and infants stronger. Moreover, we present an RSS feed where they can get updates on their babies' status. By this way, parents can access their babies' status even they are not with their babies. Analyzing babies' voices and making their status accessible is a unique software solution in the world.

Secondly, we created a dynamic, interactive information-based system based on artificial intelligence. Parents can easily get the information that they need immediately, under experts' supervision.

**How has the Windows Live platform made your entry better?**

The Windows Live Platform helped us to create the world's biggest parental software solution and community, i'mParent,, to innovate sustainability.

**What has been your favorite part of the Imagine Cup competition thus far?**

Innovating sustainability.

**How did you come up with your idea?**

We imagined a sustainable world for parents and infants all over the world.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

We solved real and common problems in the world by referencing researches and field experts' opinions. We're planning to launch our project soon.

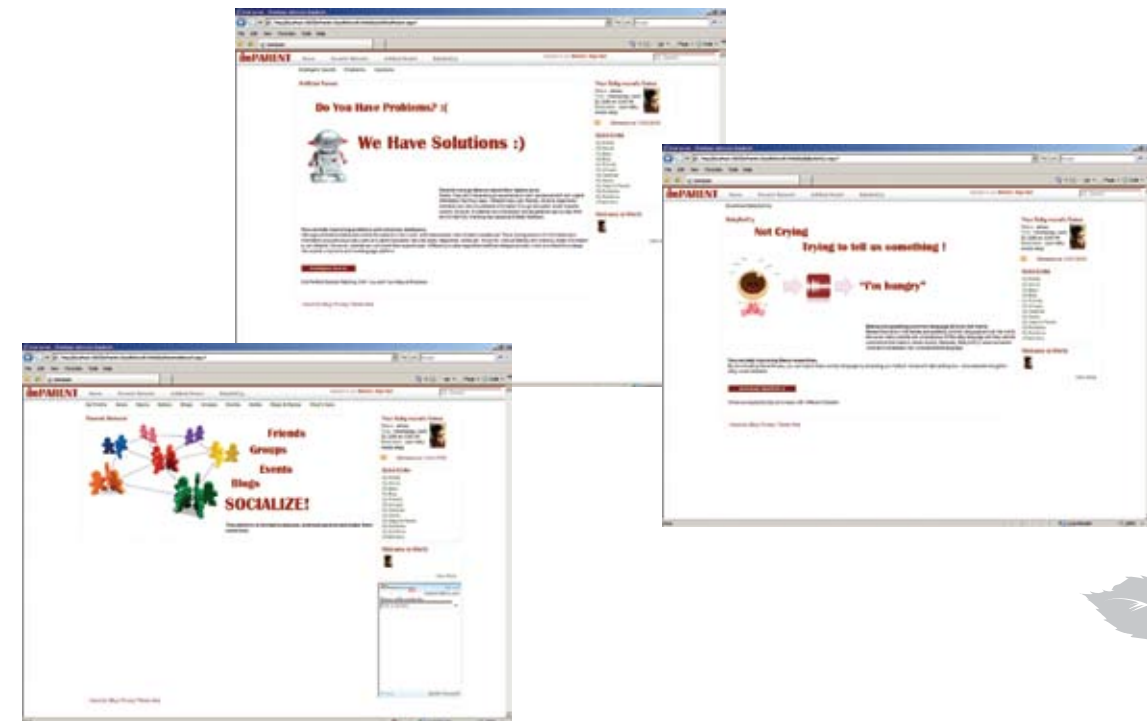
**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We developed a solution and community for solving real life problems all over the world. i'mParent approaches these problem in a new way via technology. We believe that we leverage a big step for sustainable living by solving vital problems and enabling information accessible from everywhere for parents. We help to develop babies' language and solve one of the secrets of humanity. Moreover, information that we have in both parts have crucial importance for future researches. As Confucius said, "Future generation is the most important thing."

**Links to more information**

Blog: <http://imparent.spaces.live.com>

Web site: <http://www.imparent.com>



## Technology Solutions



## Embedded Development

Embedded devices are becoming smarter, more powerful, and woven seamlessly into the fabric of our everyday lives. The Embedded Development Invitational invites students to unlock the potential of these devices by developing technology solutions for embedded devices that will help address real-world challenges. The competition challenges students to go beyond desktop development and use their creativity to build a hardware and software solution based on embedded design. Using Windows Embedded CE as the software platform and the ICOP eBox-4300 as the hardware platform, teams of two to four students compete by building working prototypes of an embedded device designed to solve some of our world's toughest problems within the Imagine Cup 2008 theme, "Imagine a world where technology enables a sustainable environment."

*Embedded  
Development*

Brazil



## Desconstruindo

### Team Members

Fernando Ferreira de França  
Rafael Gonçalves Gama  
Hugo da Silva Nogueira

### Mentor

Alexander Mazolli Lisboa

### Title of Project Sustainability in Optimization of Residential Electric Power Consumption

#### Project Overview

Nowadays there's a lot of talk about improving our natural resources consumption. We need to find a clear way to use resources without causing any lasting impact that will be reflected in future generations. By keeping the planet healthy, we can help make our stay here as long as possible.

One of the most important resources for our society is electric power. The electricity obtained through/from combustion plants contributes to the depletion of resources and to global warming. Hydroelectric plants demand the construction of dams that flood lands and end areas that were inhabited before by many species of flora and fauna. There is always an injury to nature, to a greater or lesser extent.

In Brazil, almost 90% of our energy is obtained through hydroelectric plants. We already lived through a complete blackout in 2001, caused by the high consumption of electricity and the low level in the rivers because of a drought and less rainfall.

Our project implements the optimization of energy consumption, reducing wastefulness in the use of electricity in the residences. This energy has a high cost to the environment and to our society, so we are applying the sustainability concept.

#### Technology/Software Used

- Windows Embedded CE 6.0
- Visual Studio 2005
- MPLAB v. 7.41 IDE
- Microchip C18 Compiler v. 3.11 Student Edition
- Cerne Net Microcontrolled Ethernet Platform

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

What inspired us to enter the Microsoft Imagine Cup was mainly the possibility to apply in practice the concepts we have learned in the classroom. In particular the theme of this year was very important to us as we are very interested in the important issue of maintaining the environment.

We chose the Embedded Development category because it enables you to apply knowledge in various fields of study such as electronics, electrical engineering, computers, and automation. This competition is a unique opportunity to create a significant academic project and convert it into something positive for society.

#### Background on your team: Who are you and how did you meet?

We are all students of engineering. Fernando and Rafael are friends from childhood, who already played together in a band. Fernando Hugo met them at the faculty of engineering and we had in common the desire to produce projects in the area of embedded devices. That was what united us to work together.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

Rafael has experience in programming for PIC family of microcontrollers, which was one of the foundations of our development. But in general none of us had practical experience with embedded design, only theory. We learned a lot during the process.

#### What has been your favorite part of the Imagine Cup competition thus far?

The development and working with hardware and embedded systems; we love to work with hardware programming. All the environment research was also important for us because our main goal was to unite these two areas and produce something that can make a difference in people's lives.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

Our idea already existed before the Imagine Cup. Our desire was to develop something in the field of engineering, computing, and automation, focused on the environment. We can cite as a major challenge the hardware development and programming. It is not easy.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Our main goal after the end of the Imagine Cup is improving our project and applying the concept of neural networks, another field that we want to study and implement.

We want to make an intelligent system that's able to assimilate and learn the habits of consumption, creating more efficiency. Yes, we'd like to then transform our solution into a commercial product with this important difference: We want to offer more than comfort; we want to provide a solution to sustainability.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

Meeting the other teams and seeing France. For us this opportunity has already made us victorious and we are honored to represent our country.

#### Links to more information

Here's our official Web site is a blog where we write about science and technology. We are now also keeping a log of our participation in the Imagine Cup Finals.  
<http://desconstruindo.eng.br/imagine-cup-2008>



## CUBE

Team Members  
Song Songzheng  
Chen Yanying  
Cha Run

Mentor  
Ma Yongtao

### Title of Project Automatic Polluting-Source Locating System

#### Project Overview

With the rapid growth of the economy in recent decades, the growth of the economy itself and the quality of people's lives are threatened by environmental problems such as water pollution. It is true that governments all over the world have taken measures to protect the environment. However, pollution of our precious Earth is still a huge challenge for us. For example, although it's illegal, some companies are continuing to discharging the waste water through pipes in secret. Governments and authorities need a good solution to monitor these activities.

APSLS (Automatic Polluting-Source Locating System) can surely do a good job here. By placing a series of sensors along the river where most polluting factories are built, our system can detect and alarm such illegal discharging underground. We are sure that it will enhance environmental management and help to create a more sustainable developmental pattern.

#### Technology/Software Used

- PHSJ-3F (PH detection apparatus)
- Wavecom 2406B (GPRS module)
- eBox-4300
- Visual Studio2005
- SQL Server 2005

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

Two years ago, when we were freshman students, we heard that one team from our university went to the finals of the Windows Embedded Challenge competition, which later became the Embedded Development category in the Imagine Cup. At that time, we felt very proud of our university. So when we felt that we had enough knowledge to try, we participated in the Imagine Cup last year.

When it comes to Embedded Development, we think the environment issue is very important in our modern society so that we want to do something beneficial for the world. What is more, we think the Embedded Development category is interesting and we want to learn more about it. There are the reasons we choose this competition.

#### Background on your team: Who are you and how did you meet?

We are all juniors in the School of EE, Tianjin University. Because we are from the same school and often attended classes together, we know each other in the first year in university. The same interests in programming and system design made us become very good friends.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

We were not very familiar with embedded design before the Imagine Cup. The typical experiments we do in school are related to circuit or signal processing. We just have some common sense of the embedded design. So compared with some other teams, we may have encountered more difficulties. But from a different perspective, we have taken more challenges and learned more.

#### What has been your favorite part of the Imagine Cup competition thus far?

Well, in our opinion, the favorite part in this competition is working in a team. We think the best way to work is joining in a team and the efficiency will be the highest. We can learn more from others and have discussions so that we can up keep together.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

We were astonished by a picture uncovered in the TV news of a peasant anxiously and worryingly standing by his wilting and dying crops while effluent was going out of a small pipe remotely. Till now no efficient apparatus could detect and alarm such illegal discharging underground. Stories like this directly led to our Automatic Polluting-Source Locating System. We are sure that it will enhance the environmental management and help to create a more sustainable developmental pattern.

One of the most challenging problems we have to deal with is that we have to balance the time and energy between our school work and the implementation of our system.

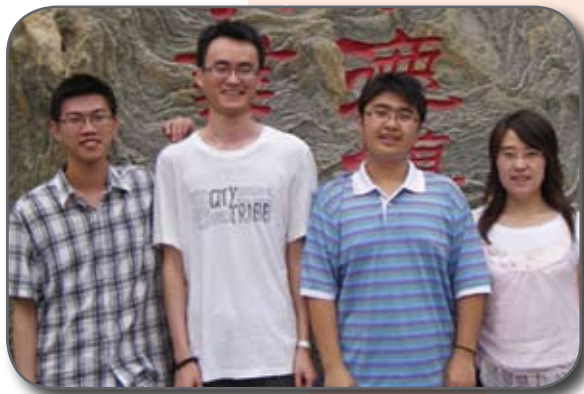
#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

After this competition, we will put more effort into protecting the environment. During the process of our design, we learned a lot about the importance of a healthy environment. However, the fact is more pollution is going on and we must do something to stop this. To be honest, at this time we do not have a plan to take part in a business, but we can consider this after the final.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

At present, we are really excited and busy with the preparation for the finals. And what appeals most to us is the opportunity, one that we can meet the top students all over the world as well as the skilled experts. Such communication, we believe, can enhance our professional knowledge, broaden our view, and help to develop friendship among us.

## China



## Wings

## Team Members

Shibiao Xu  
Junjie Li  
Zhongjie Wang  
Lei Yan

Mentor  
Li Guo

### Title of Project AquaMarine

#### Project Overview

AquaMarine is a real-time data acquisition and processing system. Oil spill accidents are one of the environmental disasters that have time-lasting negative impact to the environment. Through embedded and wireless network technologies, AquaMarine will help people to discover the oil spill accidents immediately and send out in-time early warning in order to minimize the reacting time and minimize the negative impact of the accidents to the environment. AquaMarine is our effort to enable a sustainable environment through technologies.

#### Technology/Software Used

- Windows Embedded CE 6.0 R2
- Visual Studio 2005 Professional
- SQL Server 2005 Developer Edition
- .NET Compact Framework 2.0
- Infrared Image Processing Algorithm

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

When we saw the poster of the Imagine Cup for the first time on our campus, we felt eager to participate in it. We think it is a good opportunity to unleash our passion, our talent, and our imagination. For us, the Imagine Cup is not only a chance to prove our potential, but also a chance for using what we have learned to change the world. Moreover, the Imagine Cup is a chance to exchange our idea with students from all over the world, which will be very helpful for us in solving practical problems.

We think that an embedded device has a closer relationship with people's daily life and we can do more in this field to improve the environment and people's lives, so we choose the Embedded Development invitational. We also had some experience in developing embedded systems before which we can leverage.

#### Background on your team: Who are you and how did you meet?

Our team leader is Shibiao Xu, whose major is Information Engineering. Junjie Li and Zhongjie Wang both study Information Security. Lei Yan's major is Information Engineering. All of us are studying in Information Engineering School in Beijing University of Posts and Telecommunications. In fact, having been impressed by the Microsoft Imagination On Campus Seminars, we feel eager to take part in the Imagine Cup 2008. And then, just as we are now, the four of us who have the same dream came together to form Wings.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

We had some experience with embedded design such as MCU, FPGA, and DSP. We also had participated in some national embedded design contests before competing in the Imagine Cup, which helps us a lot in this competition. What is more, we also took some courses in embedded design such as Data Acquisition and Embedded Technology.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the Imagine Cup competition was the process when we were doing some research and investigation. For our research and investigation, we traveled from Beijing to Qingdao where the State Oceanic Administration of People's Republic of China is located. In this process, we learned that when facing a practical problem, there are practical steps we should take to solve it: Where should we cut in and what is the problem's key point. Having finished this part, we have a strong feeling that we become different when facing practical problems. We can work efficiently and also see the problem from every angle.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

Through our field research on the relevant information we found that, at present, there still lacks an effective real-time monitoring system which ensures rapid reaction right after an oil spill takes place. On the other hand, oil spill pollution gets more and more attention from every country all over the world. So we came up with our idea to develop such a device. While developing, I think the biggest challenge is to build the buoy in our project because it can be neither too big nor too small. If too big, it cannot achieve an accurate data acquisition. If too small, it cannot bear the awful environment in the ocean. But luckily, in the end, we made it.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

After the Imagine Cup finals in France, we plan to introduce our solution to the State Oceanic Administration of People's Republic of China. This will help our system become widely used, which will surely lead to an improvement in the detection and prevention of oil spill in the ocean.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

What we are most looking forward to experiencing at the Worldwide Finals in France is to share our idea about our system with others and make presentations about how our system can enable a sustainable environment in the future. Also, we are looking forward to making friends with talented people from other countries and regions and exchanging ideas with each other.

#### Links to more information

<http://wingsic2008.blogspot.com/>

## France



### The Shads

#### Team Members

Sebastien Mornas (aka Shadow78)  
Alexandre Reiss (aka Shadyisback)  
Jonathan Ghalmi (aka Shadok)  
Caroline Vigouroux (aka Shadoline)

**Title of Project** The ABC Project alias "The Clever Cart"

#### Project Overview

Every product we consume has an impact on the environment. Our goal is to minimize the impact of the products we choose by focusing on the beginning of the chain of consumption.

Imagine you're in a supermarket, asking yourself whether the product you have in your hands sustains the environment or not. For two products of the same category the impact can be quite different. The ABC Project solution is a device embedded in your shopping cart that analyzes this impact. With ABC everyone will be able to choose the products that are the best for the environment.

The ABC Project recognizes the products you chose. The system indicates an "environmental index." This index assesses whether the product is better or worse than the others in the same category. At the end of your shopping, the system provides a global index for your cart. Since the solution can be used in the whole supermarket and enables you to compare all products for sale, The ABC Project is a powerful embedded system.

We think that if everyone takes a simple step, together we can make the world better.

#### Technology/Software Used

- Windows Embedded CE 6.0
- Visual Studio 2005 Professional
- Microsoft Platform Builder 6.0 Add-in for Visual Studio
- .NET Compact Framework 2.0
- Visual C# 2.0
- ICOP eBox-4300

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

We have always wanted to participate in the Imagine Cup because it is an incredible chance to meet people from many places over the world and to see students like us with the same passion: technology. Moreover the Imagine Cup is an opportunity to make a project real. It allows us to think it through from A to Z: the Imagine Cup makes our ideas take life.

Embedded computers are more and more common in daily life; so we found it interesting to develop programs for this kind of device. Our passion about technology is based on wonder. This wonder inspired us to understand how new mobile devices work. This understanding makes us want to be players in this market in the future.

#### Background on your team: Who are you and how did you meet?

We are four students at EPITA (Ecole Pour l'Informatique et les Techniques Avancées). This is a French computer science engineering university. We have been friends since the beginning of the EPITA program. We have worked together on various projects for 3 years. For that reason we know the strengths and weaknesses of each other, which is very useful when we work together.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

For our team, developing on embedded devices was a real premiere. "All I did was a calculator and Connect 4 on a PocketPC running Windows Mobile 5," Sebastien says. In general everybody on the team has a mobile phone and mobile devices such as PocketPC but we infrequently program our devices. We wanted to learn programming on embedded devices because it was something really new for us. With this experience we have got a real passion for programming on embedded devices.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the Imagine Cup was indisputably the coaching weekend at the Rugby Formation Center located in the south of Paris. This stay allowed us to meet many people who work in protecting the environment and also from Microsoft. This helped us to make our project more feasible. We also met many students that came from many educational institutions. We shared our experiences about the Imagine Cup contest which is very useful in this kind of competition. This has been an amazing experience for all the team.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

We found our idea the day Bill Gates went to the Sorbonne in Paris. Alexandre said to us that he had an idea while having lunch. He realized how much packaging we could use for our foodstuff. That was how the idea emerged. The main personal challenge to face was to combine our studies and the conception of the project because it was very different than our actual studies. Technically it was a great challenge because we discovered technologies we did not know before, for instance Windows CE programming.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We think our project has a real potential to change consumption habits, therefore we really want it to be real and we want it to be used in big stores. In France, we have already interested journalists during the national Finals and we are very proud of the attractiveness of our project. We also hope that thanks to the Imagine Cup, investors will pay attention to our project and may help us or give us the means to make the distribution of the "clever cart" possible. The environmental issues really exist and we think that our project meets a real need.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We hope the Worldwide Finals in France will be amazing for everyone. As the Imagine Cup Finals take place in our home country we hope that all the students of the world will enjoy the journey and that they will have a good image of France. Obviously we hope we will get the highest rank possible in the competition and that it will be a moment that no one will ever forget.

## India



### DCEites

Team Members  
Kumar Ankit  
Siddharth Singhal  
Sunil Kumar

Mentor  
Mr. Sanjay Bansal

**Title of Project** Jal

#### Project Overview

Rivers are of immense importance to human civilization, not only as a source of fresh water but also economically, geologically, biologically, historically, and culturally. It is imperative to keep a check on the quality of river water for nourishment of ecology in and around the rivers.

Our proposed solution is to identify the source of pollution in river water. A network of suitable sensors is placed at strategic locations along the path of rivers for monitoring and detection of the potential sources of pollution by following a carefully designed algorithm for the same. Beside this, a robotic boat is made to traverse along the route of river to identify any non-point source of pollution (pollutants dispersed in the river water). The values of readings as obtained by different sensors are displayed on a map based interface, in real time over the Internet. Corrective measures are suggested by the system to different users according to their role and relevance. Thus we intend to provide a complete solution for sustainable environment in river systems.

#### Technology/Software Used

- Windows Embedded CE 6.0
- Virtual Earth Map Control SDK 6.1
- Windows CE 6.0
- Visual Studio 2005
- GPS
- ZigBee Alliance

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

Each year the Imagine Cup features a unique altruistic theme, encouraging us to tackle the world's toughest problems and in turn apply our imagination, passion and creativity to technology innovations. It also enables us to experience and interact with fellow students from all over the globe, providing a launching pad for future opportunities. The Embedded Development Invitational enables us to learn cutting-edge technology that is dominating the marketplace.

#### Background on your team: Who are you and how did you meet?

We are final year students of Delhi College of Engineering. Kumar Ankit is pursuing Computer Sciences; Siddharth Singhal, Information Technology; and Sunil Kumar, Electrical Engineering. We have been working together since our early college years on a variety of projects and thus know each others' competencies. This motivated us to work together towards this year's theme of sustainable environment. Two of us were worldwide finalists last year in the Embedded Invitational.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

We had some experience in the fields of image processing, robotics, RTOS, etc. Participating in the Imagine cup has opened a whole new set of opportunities for us, providing us a platform to learn new technologies and apply them to solve tough real world problems.

#### What has been your favorite part of the Imagine Cup competition thus far?

The best thing about the Imagine Cup is the freedom and power to imagine, and the necessary tools and devices to implement our ideas into a real world product.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

Rapid industrialization and urbanization have lead to pollution of rivers. The contamination of river water by toxic substances is continuously degrading the quality of river water and hence affecting its ecology. Therefore it is of prime importance prevent river pollution to make the environment sustainable for all. We belong to Delhi and have grown up seeing the dreadful state of river Yamuna. We talked to authorities, conducted research, and decided to come up with a solution.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We plan to take forward our idea and help the society. We have built a business plan around our product at the Microsoft Innovation Accelerator '08 program held at CIIE, IIM Ahmadabad.

We look forward to launching our product soon. "Jal" is ready to implement with minimum infrastructure requirement, so the team is sure about the commercial acceptance of the product.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to evangelizing the idea of river water sustainability through "Jal." We hope this is going to be a great experience and we are excited to interact with our fellow students from all over the globe. We are sure it will provide us with a launching pad for future opportunities.



India



## Douleur Vue Ame

### Team Members

Pranay Sharma  
Ankur Verma  
Rohit Chawla  
Vishal Gupta

### Mentor

Ms. Summy Kataria

### Title of Project Composite Vehicular Pollution and Dynamic Density Control (CVPDDC)

#### Project Overview

Almost all countries today are plagued by the adverse effects of ever increasing pollution. One of the major contributors of this problem is ever increasing traffic. One of the many studies done by government organizations (CRRRI India) shows that the daily vehicular pollution load (in tonnes) generated due to automobiles in Delhi, India, alone amounts to 1046.30, including 64% carbon monoxide and 23% hydrocarbons. Further, in just 466 signalized traffic intersections in Delhi, 321 kilo-litres of petrol and 101 kilo-litres of diesel are wasted every day due to idling of vehicles. Figures for the year 1999 show the annual loss at these intersections alone comes to around US\$61.4 million—and since then the vehicles registered on Indian roads have increased about two- to three-fold.

Our solution, CVPDDC, takes care of the above issues, tackling them simultaneously. In CVPDDC, we exploit the 802.15.4 wireless network architecture for localization of vehicles (i.e., finding out the approximate location and direction of the vehicle with respect to the traffic light). By using this information, along with the other data, like vehicle speed, and “time left for the light to turn green or red,” we could control the vehicle’s ignition by “cutting it off” and then “digitally hotwiring” it depending upon the status of the traffic light. Also the status of traffic lights is monitored by dynamically monitoring the vehicle density at traffic junctions. We effectively control vehicle ignition and switch it off in case of idling for more than specified duration of time. Thus we save money and man hours, and most importantly help create a sustainable ENVIRONMENT.

#### Technology/Software Used

- eBox-4300
- IEEE 802.15.4 protocol (Xbee Series 1)
- XCTU Software for Xbee
- AVR Studio
- Atmega8 Microcontroller Circuitry
- Windows Embedded CE 6.0 R2
- .NET and Visual Studio 2005
- Automobile Electronics
- Pro/E 4.0

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

We as a team thought that the Microsoft Imagine Cup could give us the right platform and thrust to work towards a common goal and get that adrenaline rushing through our veins. And this year the environmental theme is timely for environment-lovers like us. The world today really could do with some help regarding the environment. That’s where we thought our idea could help, as the competition could be a source through which it might get implemented.

Our original idea could only be practically implemented through development of an embedded device so we chose the Embedded Development invitational.

#### Background on your team: Who are you and how did you meet?

Our team is a mixture of brains from different flavors of engineering. All four team members are from different engineering streams comprised of manufacturing process and automation engineering, computer engineering electronics, communication engineering, and biotechnology.

Although we are from different streams we still complement each other and think on the same wavelength. We were introduced to each other by a common friend. And because of having similar interests in embedded systems development, we got along like a “house on fire.” Our mentor is an intuitive and a dynamic personality who has been quite successfully managing her personal business and studies side-by-side. She has been a constant source of advice in converting our project into a business reality.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

One common thing between all our team members is the knowledge of embedded systems. Two of us were from the previous top 200 teams selected for the Imagine Cup 2007 Embedded Design Challenge and had an extensive experience of building OS images, developing applications for Windows CE, and deploying them to ICOP eBox2300. The other one has a strong knowledge about automobile electronics (gained through an All Terrain Vehicle project) and Xbee modules (having done a principle project on deploying the same at Gerontechnology Lab, Yuan Ze University, Taiwan). The last one has good experience and extensive practical knowledge which he gained after working on numerous projects in software design. Thus, our team is a right blend to handle the hardware and software aspects of the system.

#### What has been your favorite part of the Imagine Cup competition thus far?

The excitement of working on a project that is accredited internationally and collaborating with each member of the team for the development of the project was an enriching experience. Further our project aims at maintaining a sustainable environment and also gives us an opportunity to rejoice that we are contributing our part in saving our environment.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

One of our team members had done training in Taiwan on the work related to wireless sensor communication using Xbees. From there an idea of use of Xbees for object localization struck him. He mentioned it on returning, whilst the rest of us were busy discussing the Imagine Cup this year. Suddenly we had a brainwave and caught upon the idea, since each one of us was aware of the situation regarding traffic jams and rising fuel costs in our country. Thus, idea upon idea piled up and the thought process was refined further to take the shape of this amazing project.

As for the technological challenges, being from different streams helped us getting past them with relative ease, as different team members already had knowledge relating to different areas that were required for the project, like automobiles, embedded system, C# programming ,Xbees, etc.

Since our team is made up of students from different colleges and studying in different semesters of Engineering, managing our meeting times, work distribution, and other team management-related issues has been the biggest personal challenges during the competition.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We hope that the idea gets recognized and accepted by a venture capitalist. Business is definitely on our minds. In fact, this was one of the main reasons we chose Imagine Cup as a platform to present our idea – though, we must admit, we started this project innocuously as any normal college project. But as our work progressed, we came to know about the “real” implications of our idea. In fact, we are considering our presentation as a business proposal because we are quite sure that barring a few technical modifications, our product is market-ready.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

First of all, we are having a difficult time in getting over the euphoria that we are going to France. We all know the position of Microsoft Corporation globally, and to be personally invited by this organization to showcase our idea is a dream come true for any technophile. Now that we have been finally granted that opportunity, we plan to make the most out of it. We want to savor the experience of presenting a technology developed by us on a global platform among the world’s most creative minds. We, the team Douleur Vue Ame, are definitely looking forward to meeting other international teams in France and making the most out of the experience that we are getting.

## Ireland



## AcidRain

## Team Members

Brian Byrne  
Aodhan Coffey  
Karl O'Dwyer

## Mentor

Tom Lysaght

### Title of Project Voila – The Vegetable Oil Automobile

#### Project Overview

With rising oil prices and global warming the world must eventually make a switch to renewable fuels. This is inevitable and vital for a sustainable environment. However, fuelling an unmodified modern diesel engine on plant oils will cause engine failure or fuel pump failure. Most bio-fuel conversion kits require a second fuel tank, which takes up boot space, and also manual switches, making them both expensive and inconvenient.

Team AcidRain's Voila embedded solution, in promoting a sustainable environment, has both original and innovative solutions and it also builds on other ideas in an original and innovative way. Voila is an optimized, embedded conversion kit which offers a novel solution to the problem of reducing carbon emissions through enabling plant oil powered engines. Voila will automatically, in real-time, detect when to engage the glow plugs, thus enabling the engine to start and operate in colder conditions than is currently possible. Thus, we can begin to solve problem of using fuels with a higher flash point and auto-ignition temperature. No one has attempted to harness the heat energy that an exhaust provides and so this energy is typically wasted. Our project will address this problem entirely through the addition of a robotic fuel line.

Anyone who uses diesel would be a potential user of this system. It is flexible enough to be used in everything from private motor transport to electricity generation. Voila will utilize an in-car touch screen to allow a user who is not computer literate to easily interact with our unique technology. Simply by touching the screen, the user would select the plant oil they wish to use and, "Voila!"— the ebox will do the rest, adjusting the program variables to suit.

#### Technology/Software Used

- eBox-4300
- Windows CE 6.0
- Visual Studio 2005
- .NET Compact Framework 2.0
- Phidget (various components)
- Touch Screen technology

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

Brian, having heard of the Imagine Cup competition at Maynooth, and having attended a presentation of the 2007 World finals by Liam Cronin, was inspired at the opportunity to take part in a competition which focused on solutions to sustaining our environment. Brian was interested in gaining "hands on" experience working with computers. Karl and Aodhan, who had also heard of the competition were also inspired by the environmental theme, both having experience and knowledge of bio-fuels. The Imagine Cup Embedded Development invitational provided the ideal challenge for this idea. Team AcidRain has set out to create a "one size fits all" kit using the eBox. This embedded solution will convert any diesel engine to run on any plant oil whether it be olive oil, rapeseed oil or sunflower oil, to name but a few.

The embedded development section was the perfect choice for this type of project. All team members were interested in gaining experience working with embedded devices and this was a major factor in our decision to compete.

#### Background on your team: Who are you and how did you meet?

Brian Byrne, a geography, economics, and computer science student, spoke with computer science lecturer (and team mentor) Tom Lysaght about his idea. Tom put Brian in contact with students Karl O'Dwyer and Aodhan Coffey. Karl, a computer science software engineering student who also studied chemistry, has much experience with bio-fuels, having exhibited a project entitled "Bio-fuel for Thought" at the BT Young Scientist and Technology Exhibition 2006. Aodhan Coffey, an electronic engineering student, is well versed in physics, and in particular the area of thermodynamics. Brian, Karl and Aodhan met up, discussed the idea, and immediately knew they could make it work. Team AcidRain was formed.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

For both Aodhan and Brian, embedded design was an entirely new challenge; dealing with the constraints of an embedded platform was completely new territory. However Aodhan and Brian both have experience working with their hands, Aodhan with electronics and electrics and Brian with car mechanics. Karl, on the other hand, has been dabbling in developing embedded systems for a few years prior and has been continuously testing and tinkering with Windows CE during this project. Karl has previously developed applications for mobile phone operating systems including Windows CE.

#### What has been your favorite part of the Imagine Cup competition thus far?

Team AcidRain found it exciting to work on a solution like this. Discovering problems and attempting to pre-empt other problems was a challenge the team enjoyed and excelled at. The team bonded well and became good friends spending long hours working late into the night in the computer labs. The team started a routine of having lunch on Fridays together where we pooled ideas when all team members were free.

The team gelled well as each member brought different skills and mindset into the project. Brian, who studies geography and economics as well as computer science, researched the sustainability and viability of using these types of fuel. Karl brought his programming skills into the project and was able to advise how to interface various parts with the eBox. Aodhan brought his engineering skills into the project and was able to advise the team on how to manufacture the team's unique and original systems.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

Brian, while trying to figure out a way to harness the wasted heat energy from his exhaust system in order to use plant oils in his engine, was also doing robotics, as part of the computer science aspect of his course. Brian imagined that a robotic fuel line would solve the problem. Team AcidRain discussed the idea of a diesel-to-biofuel conversion kit. Such a solution would require a computer controlled system, with an intuitive interface for ease of use.

Team AcidRain came across technical hurdles such as energy consumption. To prevent battery drainage the team decided on the most efficient methods of heating and placed this strategically. Other hurdles such as building a robotic arm which can hold up to the vibrations in a moving vehicle are being continuously tried and tested. Balancing college life, exams, part-time jobs, and the project was also a huge challenge.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Team AcidRain is planning a business venture and is hoping that this technology will be fitted to diesel engines and generators and thus help create a cleaner and more sustainable environment for us all. Plans on furthering the project with a hybrid system add-on are in the pipeline and will be further researched and implemented over the summer.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

Team AcidRain is interested in meeting people with similar interests and swapping ideas on how to create a more sustainable environment. The team is looking forward to showcasing the project on a world stage. The team is hoping to drive a vehicle fitted with the Voila system and are looking forward to the road trip! The team plans on blogging this journey on the Team Web site with video footage (if internet connections along the route permit). As the team are good friends now we are looking forward to this aspect a lot.

#### Links to more information

[www.AcidRain.biz](http://www.AcidRain.biz)

## Korea



### Here Rose

Team Members  
Hyon Lim  
Aram So

#### Title of Project Wildlife Collision (Road Kill) Mitigation System

##### Project Overview

Our solution is designed to prevent and monitor road kill based on acoustic source localization technology. Collisions between animals and vehicles are an important transportation challenge across the world. It is estimated that over one million vertebrate animals fall victim to automobile collisions every day in the United States. Road kill causes not only environmental deterioration but also human fatalities and over \$1 billion in property damage per year. The object of our proposed device is to analyze the direction of the acoustic source and to obtain the animal location to monitor and prevent road kill. Stored data can be accessed through a Web site that uses Virtual Earth and Silverlight to visualize the data and user interfaces.

##### Technology/Software Used

###### Software

- .NET Compact Framework 2.0
- Silverlight
- Virtual Earth
- Windows Embedded CE 6.0 R2

###### Hardware

- 8-bit microprocessor (AVR)
- eBox-4300
- Stereo microphone, audio amplifier
- QuickCam Pro 5000

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

We participated in the Imagine Cup 2008 Software Design category in Korea and we won the silver prize. But we could not go to Paris because only the team that won the platinum prize could go to Paris in the Software Design category. So we modified our idea and improved our solution to join the Embedded Development category because our solution was based on an embedded environment. At last, we were selected as a World Finalist in the Imagine Cup Embedded Development category and it was the greatest experience in our lives.

#### Background on your team: Who are you and how did you meet?

We are students at Inha University located in Incheon, Korea. Hyon Lim majors in electrical engineering. Aram So majors in computer science. We discussed and researched together during our senior year because we have many similar interests. So, we participated in several domestic Software Design competitions together and won several competitions. Winning in a local software competition was not enough for our passion for software development though. We decided to participate in a world-level competition, and our choice was the Imagine Cup 2008 in Paris. So, we are here and we are glad to compete with students from around the world!

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

We were a team for many projects and participated in several local software competitions. Here is list of prizes we've won:

- The Imagine Cup 2008 South Korea local competition: Silver prize
- ABEEK (Accreditation Board for Engineering Education of Korea) Portfolio Contest: Gold prize (June 2007)
- STMicroelectronics (www.st.com) ARM7 Embedded Design Contest: 1st prize (October 2006) Award: \$5,000
- Samsung SDS (www.sds.samsung.com) IT Technology Contest: 1st prize (March 2006) Award: \$2,000
- Hyundai-Kia Future Automobile Design Contest: Bronze prize. Research funding: \$7,000. Award: \$3,000.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the competition is Embedded Development. In the future, real-world problems may become more complex and difficult. In this perspective, computing devices should exist everywhere to solve the many problems we face in the environment. Embedded Development encourages the ubiquitous and pervasive use of devices and software. That is why we like Embedded Development.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

A big challenge was working with acoustic source localization technology. Because natural sound processing is always uncertain, we suffered from the random property of natural signals. Sometimes, our solution did work well, sometimes not. During this development phase, Hyon Lim's B.S. thesis was completed.

Team AcidRain came across technical hurdles such as energy consumption. To prevent battery drainage the team decided on the most efficient methods of heating and placed this strategically. Other hurdles such as building a robotic arm which can hold up to the vibrations in a moving vehicle are being continuously tried and tested.

Balancing college life, exams, part-time jobs, and the project was also a huge challenge.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Our solution can be used to detect, monitor, and prevent road kill in many countries. However, we think the accuracy of detection is the key to success. Therefore, after the Imagine Cup, we'll concentrate on improving our detection accuracy so that it works work well even if our solution is located in a severe outdoor environment. We will also work hard to enable the governments of many countries to use our solution to protect nature.

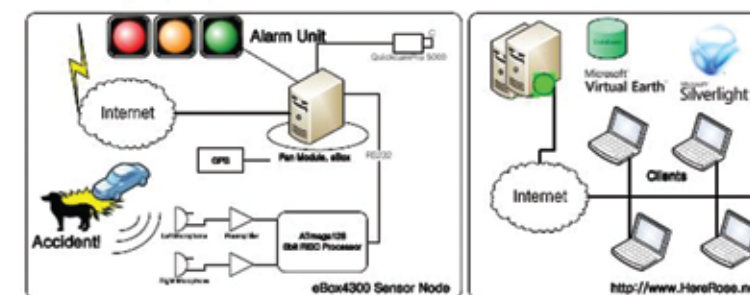
#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We want to compete against students from other countries and universities. We always imagined a world where technology helps to create a better life. The Imagine Cup has the same philosophy as we do. We did not hesitate to join this premier student competition because both of us have the same philosophy. Moreover, embedded development is our main interest. So here we are!

#### Links to more information

[www.hererose.net](http://www.hererose.net)

Hyon Lim's home page at [www.alexlab.net/mywiki/doku.php](http://www.alexlab.net/mywiki/doku.php)



## Poland



## Aero@PUT

## Team Members

Piotr Kryger  
 Mikołaj Małaczyński  
 Jakub Pawłowski  
 Piotr Słęczak

## Mentor

Wojciech Swiatała

### Title of Project Ecopteron

#### Project Overview

Ecopteron is an easy-to-use, self-navigating, unmanned, small, electric helicopter designed to monitor dynamic environmental processes. Ecopteron aims at monitoring elements of energy and water balance over a range of landscapes (mosaic and monocultural landscapes as well as mixed landscapes where fields are separated by woody shelter belts and surface water bodies such as ponds).

Use of an autonomous helicopter equipped with a camera enables us to trace local environmental changes, thus giving an understanding of the influence of the landscape structure on spatial and temporal distribution of temperature. The availability of sequences of low-cost aerial photographs of small water basins allows for the evaluation of current water quantity and provides an opportunity to manage the small water basin retention in the region in the most effective way.

Extending solutions with the simplest thermovision camera will additionally enable Ecopteron to detect the occurrence of crop pestilence, limiting the amount of adverse obligatory spraying. Ecopteron will provide the local landscape architects and the farm community with valuable information about the current and the long-term environmental conditions in the region.

The adoption of our solution by municipalities will be a small step towards sustaining environmental balance in the age of unavoidable climate change.

#### Technology/Software Used

- .NET Compact Framework
- .NET Framework 3.5
- C#
- C++ unmanaged
- eBox-4300, the main "brain" of the system
- Remote helicopter model with accelerometers, compass, altimeter, gyroscope, RPM meter, GPS, camera, gas sensors, microcontrollers (ARM, AVR), I2C Serial Bus, RS-232
- Windows Embedded CE

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

The Imagine Cup is a great challenge, and we do like the thrill of competition. We chose the Embedded Development invitational as the best opportunity for those who would like to reconcile their passion for electronics and software.

#### Background on your team: Who are you and how did you meet?

Two of us have known each other since secondary school. The rest of us met at our university. We study at Poznan University of Technology, so our interests focus obviously on technology: computer science and electronics. In our leisure hours, we play tennis, football, and basketball; we ski and sail, and we practice martial arts. The two of us love playing the guitar.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

We met in a laboratory for the prototyping of electronic devices in the Poznan University of Technology while preparing a project for the Imagine Cup Korea 2007 that was finally advanced to the top six. Taking advantage of the experiences from the previously successful projects, which were done by our team, we decided to take it one step further and design a hard real-time system.

#### What has been your favorite part of the Imagine Cup competition thus far?

Obviously, the thrill of waiting for the results of the second round of the competition was our favorite part! And, seeing our name in the list of Finalists on the Imagine Cup Web site!

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

As a group of students sharing a passion for small, unmanned helicopters, we spent hours analyzing possibilities of using autonomous helicopters as a flexible remote sensor that monitors important environmental indicators. We consulted with professors from the Polish Academy of Sciences about our vision in several informal meetings. Both parts of an initial phase of the project were very challenging! Moreover, we worked in a geographically distributed team. One of us studies currently in Germany. Remote cooperation let us be more disciplined than ever before!

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We plan to improve the current working prototype and make it a fully fledged product. Afterwards, we could commercialize our solution.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We believe it would be a great opportunity to meet students from many countries with a similar passion for technology. Exchanging ideas and striking up friendships with other competitors might be an unforgettable experience. Apart from that, Paris is an exciting city that is worth seeing!

#### Links to more information

[www.put.poznan.pl/en](http://www.put.poznan.pl/en)

## Romania



### GridVision

#### Team Members

Andrei Micu  
Bogdan Galusca

#### Mentor

Decebal Popescu  
*Associated Professor PhD. Eng.*

**Title of Project** MINERVA (Management Information System for Early Recovery of Valuable Ambient)

#### Project Overview

Our natural resources are running low, air and water are getting ever more polluted, and the world population is growing exponentially. That is why building a sustainable environment for generations to come is one of the most important and difficult challenges that humanity has yet faced. The way we approached this issue was by looking at the most polluted areas—the cities. We found out that the air we breathe is very often out of normal parameters and that people have very little knowledge and understanding of how their health is affected. We also realized that newly built residential areas or recreational spaces are rarely put through a thorough analysis of the environmental aspects.

In our vision of a sustainable urban environment, everyone must be aware of the consequences of polluting the atmosphere of their city and each of us has to take action against that. That is why we addressed these problems by creating an array of low-cost sensors distributed throughout the city. These sensors will gather air quality measurements and translate them into comprehensible messages and reports to benefit both municipality and citizens. When fully developed and deployed, MINERVA will significantly increase the quality of life for those who live in or around areas prone to pollution.

#### Technology/Software Used

- Microsoft Mesh Connectivity Layer (MCL) driver
- SQL Server 2005
- Visual Studio 2005
- Windows Embedded CE 6.0

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

The idea of participating in the Imagine Cup came to us a couple of years ago when we (Andrei and Bogdan) were still in high school and saw a poster about the Imagine Cup in the Computer Science Laboratory.

In October 2007, Mr. Popescu asked his Digital Computers class if anyone wanted to participate in the Imagine Cup this year in the Embedded Development invitational.

After that, we explored the theme and what the Embedded Development invitational actually meant. We found that building a solution to create a sustainable environment that uses both hardware and software to be challenging and interesting.

Next, we talked with Mr. Popescu and created the team. From then on, we began *imagining*.

#### Background on your team: Who are you and how did you meet?

Andrei and Bogdan met in high school at the Bucharest “Tudor Vianu” Computer Science High School where we were classmates. We both had a huge passion for Computer Science and went to many programming competitions. Since we had many things in common, we became friends. In the 11th grade, we had our first big project as a team. We participated in a national project where we had to create educational software. The content we have built is now available in science laboratories throughout Romania in more than 1,200 schools. We continued our studies at the Automatics and Computer Science Faculty in Bucharest. In the first year, Oracle Corporation offered us an internship in their Software Engineering team in Bucharest. It is there that we learned what it means to work in a professional international team.

Because we have such a long acquaintance and common professional and educational background, we believe that our team has big potential and a real chance of making it all the way in the Imagine Cup 2008.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

Before the Imagine Cup 2008 competition, our experience with embedded devices was limited to the courses we had taken at school. MINERVA is the first project where we actually created a solution based on an embedded design. It has been a real challenge so far and we have learned a lot. We hope that our systematic and innovative approach towards this kind of design will lead to as few problems as possible in our final solution.

#### What has been your favorite part of the Imagine Cup competition thus far?

So far, the best part of the Imagine Cup has definitely been the period prior to the Round 1 report deadline. It was then that we had to identify the problem we would address and come up with an original idea to solve it. The long brainstorming sessions and the difficult process we went through extracting the best ideas has definitely made us part of the true spirit of the Imagine Cup.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

In Bucharest, the municipality monitors air emissions using five very expensive analyzers, each requiring frequent recalibration. The data they collect is displayed in the center of Bucharest on a single panel in the form of numbers. This situation triggered our idea of creating an array of low-cost sensors that would translate the measurements into messages that everyone could understand and that is available on your mobile device. The most difficult part in the implementation process was definitely making the mesh network. This kind of technology is still in its infancy, and there were many issues regarding topology, range, and security that we had to tackle.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

The prospect of starting our own company has always been on the back of our minds and we are now really taking it into consideration. We believe our project has very big business potential. As part of MINERVA, we have designed a robust, low cost, and versatile infrastructure based on embedded devices that can be used in a huge variety of public and private applications. We think that this byproduct can potentially open a new, unexplored market.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

There are many things we look forward to in Paris. We can't wait to see the city and to visit the museums. The thing we are most eager to do, though, is to meet the people that will be there who come from so many different countries and cultures and who are from both the academic and the business worlds. We believe that this is a perfect opportunity to learn, to share ideas, and to make new friends.

## Singapore



### Trail Blazers

Team Members  
Pinto James Dominic  
Shi Ben Yong  
Hu Shuhan  
Denver Lim

Mentor  
Mr. Liaw Sze Wong  
Mr. Wu Siong Wei

#### Title of Project Environmental Monitoring System (EMS)

##### Project Overview

Clean air is an important precondition for human life and healthy ecosystems. The importance of clean air has been borne out by numerous studies over the years. Air pollution causes environmental degradation that contributes to acid rain, climate change, global warming, and heat island effects, which in turn creates adverse domino effects on human health. In 2005, the United Nations Millennium Project Task Force on Environmental Sustainability made a clarion call to address the drivers of air pollution. The key to addressing the problem of air pollution is an effective monitoring, legislation, and enforcement regime. Effective compliance monitoring is necessary to detect and correct violations and to obtain evidence for enforcement purposes. It can also be used to gauge the effectiveness and progress of any air pollution prevention program. EMS (Environmental Monitoring System) is a low-cost, low-maintenance, and self-sustainable autonomous environmental monitoring robotic system that is able to provide high-quality environmental data in real time. It is the first line of defense in the fight against air pollution. The system was conceived and designed in consultation with the key agencies responsible for the implementation and enforcement of environmental policies in Singapore. EMS is able to monitor the environment and detect harmful pollution autonomously. The environmental data, including video feeds, can then be sent back in real time to a remote base station for monitoring, analysis, and possible enforcement. The system also can perform archival and subsequent retrieval of historical data to gauge the effectiveness of legislation and enforcement measures. EMS is the first-of-its-kind system anywhere in the world, taking advantage of the power of imagination and the latest technologies to enable a more sustainable environment.

##### Technology/Software Used

- Windows Server 2003
- Windows Vista Business
- Windows Embedded CE 6.0
- SQL Server 2005
- Visual Studio .NET 2008
- Windows Embedded CE 6.0 Platform Builder
- .NET Framework 3.5
- Windows Presentation Foundation
- WIFI/ZigBee/High-Speed Downlink Packet Access (HSDPA)

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

The Imagine Cup is the world's premier technology competition. As a platform for young technologists to showcase their ideas and solutions to a world stage, it is without peer. Being young aspiring engineers-to-be, we were inspired by the success stories of past winning entries, the innovativeness of their ideas and the elegance of their solutions. Further inspiration and support came from our faculty mentors, Mr. Wu Siong Wei and Mr. Liaw Sze Wong, who tirelessly mentored and guided us through the competition. We are students from the School of Engineering (Electronics) of Nanyang Polytechnic (NYP). For three of our team members, our specialization in the final year of study is in the area of embedded systems design. It was therefore natural that we participated

in the Embedded Development invitational where we would be able to synthesize the knowledge we have acquired in the course of our study and apply them to solve real-world problems.

##### Background on your team: Who are you and how did you meet?

Team Trail Blazers is comprised of James Pinto, Shi Ben Yong, Hu Shuhan, and Denver Lim. We are students from the School of Engineering (Electronics) at Nanyang Polytechnic, with three of us specializing in Embedded Systems Design. We met while working on our final year project in the Windows Mobile Solution Center (WMSC) in the School of Engineering (Electronics). The WMSC was set up way back in 1998 as a result of a Memorandum of Understanding (MOU) between NYP and Microsoft Singapore. At that time, it was called the NYP-Microsoft Windows CE Innovation Center. Over the years, the collaboration was re-dedicated and the center was renamed to Windows Mobile Solution Center to reflect the changing technology landscape. Here at the Center, students have a chance to work on cutting-edge development projects using the latest Microsoft technologies. James Pinto, a key member of our team, also happens to be a Microsoft Student Partner. He was dedicated and passionate about Microsoft technologies. We hit it off well and found we shared a common interest in using technology to build a better world. As such, we decided to come together to form a team to trail blaze our ideas. Hence, our team name: Trail Blazers.

##### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

One of the hallmarks of Nanyang Polytechnic is its Teaching Factory concept. This acclaimed teaching model emulates a real-world environment where staff and students work closely as a team on real-life industry problems with cost, quality, reliability, and deadline constraints, and often requiring multi-disciplinary capabilities residing in different schools. In addition, the School of Engineering (Electronics) has a strong background in Embedded Systems development. The rigorous curriculum has prepared us well to meet the challenges and needs of industry. Our first two years of study were focused on developing a sound foundation in electronics engineering. Our third year of study allowed us to choose a specialization to shape our focus for a particular pillar of the electronics industry. In the case of our team, most of us chose the Embedded Systems Design specialization. Our curriculum has therefore prepared us well, equipping us with a strong foundation in embedded systems development.

##### What has been your favorite part of the Imagine Cup competition thus far?

It has been a joy every step of the way, from brainstorming to meeting with people from industries such as the National Environment Agency, Singapore Civil Defense Force, and Suntec City, who provided invaluable feedback to help shape and refine our solution. However, nothing can describe the sense of satisfaction and joy in seeing our ideas come to fruition. We have no doubt that the camaraderie and friendship built up over this time is something that will last long after this competition is over.

##### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

We were inspired by the Millennium Development Goals set by UNESCO. There were many different goals outlined, but we found common ground in addressing the drivers of air pollution since it has directly affected each team member. James is asthmatic while Denver's cousin has serious asthmatic problems. Poor air quality has tremendous effects on our health, as demonstrated during the South East Asian Haze of 1997. Shuhan and Ben Yong hail from China where air pollution is on the rise and has directly affected the human well-being and the ecosystem. We set ourselves a very aggressive deadline in order to meet specific performance milestones. So the main challenge/obstacle we had was time, or rather lack of it. But our passion and enthusiasm saw us through. We burnt our weekends and public holidays to get together and finish up with the development of our solution.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We hope the Imagine Cup will serve as a springboard for us to commercialize our idea and solution. So while most of us plan to further our education after the competition, we hope to be able to do so while concomitantly developing our idea further and attracting interest from commercial companies and investors. We believe our solution has the potential to revolutionize the environmental monitoring market by providing a cost-effective compliance monitoring solution at a competitive price point.

##### What are you most looking forward to experiencing at the Worldwide Finals in France?

There are so many things that we are looking forward to, from soaking up the wonderful French culture and cuisine, to meeting the warm Parisians and taking in the sights in the beautiful city of Paris. But most importantly, we look forward to meeting up and learning from the brightest technologists from the various countries to share ideas and suggestions, all using Microsoft technologies to create a more sustainable environment and a better world for all!

##### Links to more information

[www.trialblazersnyp.spaces.live.com](http://www.trialblazersnyp.spaces.live.com)  
[www.nyp.edu.sg](http://www.nyp.edu.sg)

## Taiwan



## Green Eyes

Team Members  
Cheng-Lung Lin  
Hsin-Chung Chen  
Chien-Ming Cheng

Mentor  
Prof. Shiao-Li Tsao

**Title of Project** Pollutant-Searcher (P-Searcher)

**Project Overview**

Air pollution severely threatens the environment we live. Through exposure to filthy pollutants in the air, our health condition will be decreased. In general, Pollutant-Searcher (P-Searcher), proposed in this project, enables people to identify the status of CO2 in the air so that they can avoid polluted environments. P-Searcher also uploads the pollution information to the server in which each user shares the concept of environmental protection through social networking. In general, if users are in polluted locations, they can turn on P-Searcher and obtain the status of CO2 in the air instantly. The purpose of P-Searcher is to improve the environment through high-technology, which absolutely conforms to the spirit of the Imagine Cup: *Imagine a world where technology enables a sustainable environment.*

**Technology/Software Used**

- Infrared (IR)
- Visual Basic .NET
- Visual C#
- Visual Studio 2005
- Windows Embedded CE 6.0
- Windows CE 6.0 Platform Builder

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?**

The Imagine Cup is a great opportunity for us to showcase our abilities and compete with the best opponents from around the world. Our background knowledge and experiences enable us to participate in this category.

**Background on your team: Who are you and how did you meet?**

Mr. Chen and Mr. Cheng are graduate students in National Chiao Tung University, Taiwan. Mr. Lin received a Masters degree from the same university last year. All of us are mates in the Broadband Radio Access Software and System Lab, Department of Computer Science.

**Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?**

We learned from embedded system courses and our research work.

**What has been your favorite part of the Imagine Cup competition thus far?**

The Teamwork has been our favorite part! We also enjoyed discussing ideas, arguing, working together, and trying to solve problems.

**How did you come up with your idea? What personal or technological challenges did you face while developing your device?**

The main culprit behind global warming is the CO2 human beings produce in daily life. If we know where the CO2 exists and who produces the CO2, as well as how severely the CO2 accumulates in the air in our everyday life, our understanding of air pollution will be much deeper. Indirectly, our consciousness of environmental protection will be increased.

There were many technological challenges. The most difficult part was to detect the status of CO2. We needed to learn and integrate knowledge from multiple subject areas.

**What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?**

After the finals, we will keep developing our system and do further researches in this topic. If a company is interested in our project, we are ready to start a business.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We look forward to meeting the most creative and intelligent people in the world and enjoying all the great events at the Worldwide Finals. We believe that it will be a wonderful and unique experience to all of us. Of course, we have to have a tour in Paris!

## Ukraine



## Sun Round Sky Around

## Team Members

Tsopa Oleksandra  
Makovetskiy Sergey  
Tkalich Inna

## Mentor

Tsopa Oleksander

**Title of Project** Mobile Eco-Monitoring System

## Project Overview

Environmental variables are in constant flux. In order to proactively respond to a changing environment, you must be able to react instantaneously to fluid environment conditions. Of particular interest are the changes occurring in the environment that are a result of human origin. To estimate the human influence on an environment, we chose to map these changes in time and space. In our mapping solution, the parameters of separate environment pollutants are overlaid on a digital map of the area of interest.

We call our mapping system the Mobile Eco-Monitoring System (MES). The EMS monitors environmental conditions as individual objects. To do this, we use the eBox 4300 with a GPS receiver as well as an EcoSensor Device that interacts with the eBox. The ecoSensor communicates with the eBox wirelessly. The EcoSensor can measure multiple environmental variables which enables us to take measurements of environment characteristics. This information is then processed and transmitted along with the appropriate GPS coordinates to a remote web server. Once at the web server, complex estimations of the situation being monitored can be made and an appropriate response recommended. The collection, processing and transmission of pollution parameters are automated and occur without human participation.

## Technology/Software Used

Our system consists of 3 primary components: the hardware, the embedded software and the web-based software. The basic components are:

**EcoSensor:** The EcoSensor component collects information through sensors and utilizes a microcontroller to handle data collection and transition to the eBox.

**Microcontroller:** The microcontroller application consists of two parts:

- Data collection through analog-digital convertor that was written in Assembler.
- Data synchronization with eBox through wireless interface. This component was developed in C

**The Web Component:** The Web component consists of a server application written using ASP.NET, a database portion that uses Microsoft SQL Server and a client application developed using Silverlight and Microsoft Virtual Earth.

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

The Imagine Cup is the biggest international competition where we can compete not only with students from our country but with people from all over the world. The vast diversity of interesting categories enables us to select the competition that fits our greatest strengths and so we selected Embedded Development. It's a great way to check our skills, to try the newest technologies, and to develop our ideas into a real product. There has been no other competition that could give us such great opportunities.

#### Background on your team: Who are you and how did you meet?

Our team consists of two students, a postgraduate student (team captain) and a mentor. We are young, energetic, active people who are eager to explore new technologies. We are studying at the Department of Radio Engineering Fundamentals of Kharkiv National University, and our mentor proposed to us that we form a team and compete in this great competition.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

Our team members had experience with embedded design in device development projects while studying at our university. We were familiar with embedded digital filters on the basis of programmable logic arrays and applications for device management by a USB port.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part was the team work, project discussion, imagining ideas, applying the knowledge we'd gained at the University to specific tasks, and studying progressive Microsoft technologies.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

We knew that we needed to develop a solution that was innovative and practical as well as germane to the theme of the environment. We did extensive research on this theme and our idea came out of one of our brainstorming sessions. We decided to make a mobile ecomonitoring system based on a very small device: the eBox.

While we were developing our project, the hardest technological challenge was to join the three parts of our project (hardware, embedded system, and Web) into one system.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

After the Imagine Cup finals, we plan to continue our studies in embedded development.

Of course, we plan making our idea into a business. We have already thought about further development of our project because we strongly believe that it provides a lot of amazing possibilities for the users and will succeed when introduced into a real market.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to meeting a lot of interesting people, showing our abilities, learning new things, and competing with students from other countries in creating solutions that will help the environment.

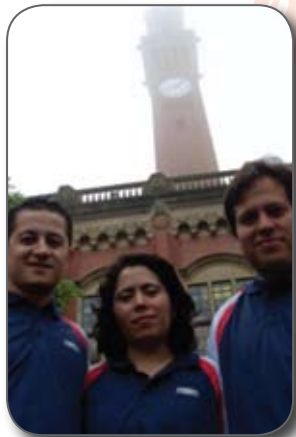
Of course, having a great time in Paris is part of what we are looking forward to, too.

#### Links to more information

knure-team.com.ua



## United Kingdom



### SuperRecycling

#### Team Members

Luis U. Hernandez-Munoz  
Victor M. Landassuri-Moreno  
Monica R. Jaime-Fonseca

#### Mentor

Dr. Sandra I. Woolley

**Title of Project** Intelligent Recycling Station

#### Project Overview

Waste from households, commerce, and industry have been increasing annually around the world, generating millions of tons of rubbish of which just a small percentage is collected for recycling. According to this, people should be encouraged to recycle in an easy manner by providing them with efficient technologies that help our environment recover.

Our project presents an interactive device that helps with the task of recycling materials, reused objects, and trash. Although it is being designed to be useful in home scenarios, it could be also helpful in the office and in industry. The device was developed using embedded technology to create an interactive and friendly user interface that encourages people to recycle and to reduce waste before buying their products. The key elements of the project are a Windows embedded CE operating system device, a flat screen, a container with separate color bins, a barcode scanner, and an optional Smartphone. An Icop-eBox-4300 is used as the principal component in this Intelligent Recycling Station, so that the size and cost of the system is reduced. Moreover, the project is versatile and can be configured according to the user's preferences, allowing different applications to be loaded and peripherals to be connected. In addition, the system also is linked to the Internet so that users can upload information to a specific Web site and announce the products they want to share with other people. In this first scope, it is designed to share electrical devices such as mobile phones and computers, but the customer can share any product desired that is no longer useful at home.

The Intelligent Recycle Station will be an excellent option to increase recycling and reusing at home with a minimum effort and consequently helping our environment and our budget.

#### Technology/Software Used

- Apache 2.2.8
- Microsoft Office Project 2003
- MySQL 5.0.51b
- PHP 5.2.6
- SQL Server 2005
- Visual Studio 2005 (C#, Platform Builder, ASP.NET 2.0)
- Windows Embedded CE 6.0
- Windows Mobile 5.0

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

We entered the Imagine Cup for several reasons. First, the Imagine Cup's subject of this year is the environment and we found a very special topic, recycling, to apply our engineering knowledge in a project that is able to help many people all over the world. This creates an added value to our postgraduate studies. Second, we can increase our teamwork abilities, leadership skills, and presentation skills to acquire an outstanding experience that in the future will help us to create our own business. Therefore, we chose the Imagine Cup because it is the worldwide top challenge to develop these skills. Finally, just working as a team is fun.

The reason we chose the Embedded Development competition was because we can merge software programming and hardware development, combining the powerful tools of Visual Studio with smartphones and PDAs.

#### Background on your team: Who are you and how did you meet?

We are three Mexican students of the University of Birmingham in the United Kingdom. Monica is undertaking postgraduate studies in Chemical Engineering, Luis is a postgraduate student in Electronic, Electrical, and Computer Engineering, and Victor is a postgraduate student in Computer Sciences. We met in October 2007 when we attended a meeting of Mexican's Society at the University of Birmingham; there we were elected as part of the society's committee to organize cultural, academic, sports, and networking activities for the members. That previous teamwork experience was part of the motivation to get together again in the Imagine Cup 2008 and propose a great recycling project to create a sustainable environment and, overall, to have fun. Our mentor is Dr. Sandra Woolley who is Lecturer in the Electronic, Electrical and Computer Engineering Department of this University and Luis' supervisor.

#### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

The experience of the team in embedded design was limited to the design of systems with microcontrollers (Luis and Victor), software design and programming (Luis and Victor), and a general knowledge of Windows Embedded CE 6.0 and the eBox-2300 (Luis), we had also a little experience in food engineering (Monica) and team work (Luis, Victor, Monica), so that we divided the tasks according to our strengths and under Dr. Woolley's direction.

#### What has been your favorite part of the Imagine Cup competition thus far?

We think our most favorite part has been the teamwork and the interaction involved in it. We have learned to trust each other and share very different experiences and knowledge. Maybe staying in a different country with another culture and language has helped us to create a close relationship of hard work and friendship. Moreover, our mentor's experience and leadership has been an invaluable help that we recognize.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

At the beginning, the first challenge was to create a team, to find the right people to undertake this fantastic adventure, who would take responsibility for their work and with the ability to produce results in a reduced amount of time. The next challenge was to develop a project useful for the environment using the ICOP eBox device and other embedded technologies. After thinking through several options, we chose a recycling project because of its international relevance and the very low reliability presented all over the world. It has been a hard task to develop a working prototype in such a small amount of time and with a minimum of experience in embedded design and cost analysis, but after great teamwork, the project was presented to the Imagine Cup judges in a detailed way, accomplishing all the requirements.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

The plan is to continue with the project while we finish our postgraduate degrees. Therefore, we will continue making a great effort to not leave it as a prototype. The next step will be to find a sponsor to create an assembly line and introduce the product (with different versions) into the market. Consequently, we will need a marketing study and a logistic approach to deliver our product. The outsourcing strategy will be used for these activities. Then, we will only be focused on the improvement and optimization of the application running in Windows CE 6.0, the interaction of the user and the system, and the expansion of its capabilities inside of the house (in the first instance). Moreover, it will be great to be Microsoft Embedded Partner.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

First of all, we look forward to enjoying the experience abroad, seeing a new country, networking with people from all over the world, and doing our best to present our project to the Imagine Cup judges. Then, we cannot wait to have feedback from this adventure in France. We are sure that it will be very useful for our project, team, and personal life.

#### Links to more information

Team's Web pages:

[www.cs.bham.ac.uk/~vlm/IRS/index.php](http://www.cs.bham.ac.uk/~vlm/IRS/index.php)

[postgrad.eee.bham.ac.uk/hernandez-munoz/ImagineCup.html](http://postgrad.eee.bham.ac.uk/hernandez-munoz/ImagineCup.html)

## United States



### Embedded Applications Technology

#### Team Members

Juan Gutierrez  
Nicolas Tisa-Leonard  
Walter Guevara  
Frederick Camba

#### Mentor

Brewer Ward

#### Title of Project VerTek Solutions Power Cycling Network

##### Project Overview

The world's resources are finite and, at the same time, our demand for them is infinite. As responsible inhabitants of the earth, it is up to us to manage our limited resources wisely to minimize the impact that we have on the environment. Energy conservation is at the forefront of today's technological revolution and is one concern in which everyone can participate.

Our project will bring energy conservation and management to the average person. We designed and created an embedded system that enables automatic power cycling of appliances when a home reaches and exceeds a predetermined threshold. Our project will also give an instant update of the current power consumption of all of the devices connected in the power cycling network. This will enable the home owner to be more energy conscientious as they cycle the most energy-consuming appliances more frequently.

##### Technology/Software Used

- .NET Compact Framework 2.0
- Atmel 8051 Microcontroller
- eBox-4300
- INSTEON Home Automation Protocol
- INSTEON PowerLinc V2 Controller Serial #2414S Rev. 1.9
- INSTEON Responder #2456D3
- Microchip MCP 3905 Energy Metering IC Evaluation Board
- Visual Studio 2005 with Platform Builder

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Embedded Development invitational?

The sustainability of the environment is a theme to which every person can relate, and is one that struck a chord with all of our group members. We knew that if there was a chance that we could combine our passion for computers and our hope of making a difference in the world, this would be the perfect competition for us to participate in. We chose the Embedded Development invitational because we had a clear idea of what our final project should be, and we knew that the hardware aspect of the project was an integral part. Simply creating the software would have severely limited the functionality of our idea and was definitely not what we wanted to accomplish as our end result.

##### Background on your team: Who are you and how did you meet?

Juan Gutierrez, Nicolas Tisa-Leonard, and Frederick Camba have been friends since high school and went to California State University, Long Beach in 2003 to study Computer Engineering and Computer Science. They met Walter Guevara in 2007 in the Computer Engineering/Computer Science Department. Altogether, they make up the Embedded Applications Team with Fred and Walter as the software engineers and Nick and Juan as the hardware engineers.

##### Team Experience: What experience did you have with embedded design before competing in the Imagine Cup?

Juan and Nick have experience programming for microcontrollers (more specifically, the 8051) using assembly and C. Both Juan and Nick have participated in the construction and testing of an autonomous maze solving robot (Micro Mouse).

##### What has been your favorite part of the Imagine Cup competition thus far?

Designing our graphical user interface on the eBox-4300 using C# has been greatly rewarding. Being able to see all of the hard work come together and function properly on the eBox was one of the final steps in our project, and it was a moment of relief and happiness for the entire group. Everything had been working separately up to that point, but integrating it together and seeing the hardware and software interact together properly indicated that we had finally achieved our goal.

##### How did you come up with your idea? What personal or technological challenges did you face while developing your device?

All of the technology used in our project already exists in one form or another. There are plenty of devices that can measure the amount of power that an appliance is draining, and appliance timers have been around for a quite some time. We combined these two devices and gave them "intelligence," so to speak; this was the basis for our entire project. The most technologically challenging aspect of our project by far was to combine all the existing technology and make it interact together in harmony. Once all of the devices could "speak" to each other, we programmed the eBox to be the brains and make decisions based on the input from all of the devices.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

After the finals, we hope to further refine our project and add more functionality. Adding more than just power sensors (such as temperature, luminosity, and so on) would help our system be more robust and help to monitor the overall efficiency of the house or building. We would like to see if our project could be used as a foundation for a business completely devoted to technology and helping to create a sustainable environment.

##### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are all looking forward to meeting interesting and innovative people from around the world that share the same concerns that we have for the environment. We cannot wait to present our project to everyone and experience the projects that everyone else has worked on, and to exchange ideas and like-minded goals for our future.

##### Links to more information

[www.verteksolutions.com](http://www.verteksolutions.com)  
[csulb.eatsociety.org](http://csulb.eatsociety.org)

## Technology Solutions



## Game Development

In the Imagine Cup's first-ever Game Development invitational, students face the ultimate test of their creative and technical skills as they create a game that is not only entertaining but has a social message about creating a sustainable environment. Addressing this year's theme to use technology to help sustain the environment, the finalists worked for months to design their own video games that are both entertaining and educational.

Using Microsoft's groundbreaking new XNA Game Studio Express, the finalist teams have the chance to gain international exposure for their games. Not only will cash prizes be awarded, the winning team will also have an opportunity to present their entry to the Microsoft games management team for possible inclusion as a download in the popular Xbox LIVE Arcade service or MSN Games Web site. The first place team will also win the opportunity to become an apprentice at Microsoft's Interactive Entertainment Business as part of its internship program. Game Development is a game contest briefed by Games for Change and XNA Technology team. The Game Development category is sponsored by XNA, Xbox, and Games for Change.



*Game Development*



## Belgium



### Drunk Puppy Productions

#### Team Members

Kenny Deriemaeker  
Filip Van Bouwel  
Timothy Vanherberghen  
Jeroen Van Raevels

#### Mentor

Brecht Kets

#### Game Title Future Flow

##### Game Overview

Future Flow is a city sim puzzle game. You, the player, have the task of transforming a polluted and unsustainable city into a clean, sustainable one. There are tools at your disposal including new technologies, renewable energy sources, and your sheer puzzle solving skill. However you must use your limited resources wisely if you are going to succeed in upgrading your city's outdated infrastructure and finding a way to make Earth's cities last.

You can use your existing infrastructure and both renewable and non-renewable resources to build new structures, and to upgrade or demolish outdated ones. You can guide the flows of power, fuel, water, and food to where they are most needed, as you get closer to your goal of making your city 100% sustainable and environmentally friendly.

Conceptually and stylistically, Future Flow borrows from traditional board games and more complex sims like SimCity and Civilization. Your city is represented by hexagonal tiles. Its aim is to educate players about sustainable technologies and the ecological problems we all need to face in the 21st century, and—of course—to be fun and challenging to play.

##### Technology/Software Used

- XNA Game Studio 2.0
- Visual Studio 2005
- Adobe Photoshop® CS3
- Autodesk 3ds Max® 9

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Game Development invitational?

We are college students who had the opportunity to enter the Imagine Cup as part of our Integration module. The freedom of creating our own game concept was compelling, and this year's theme for the Imagine Cup was very inspiring and relevant to us.

#### Background on your team: Who are you and how did you meet?

All four of us are second-year students of Digital Arts and Entertainment at the University College of West-Flanders. Some of us had already worked on school projects together during the past two years.

Filip and Timothy had programming degrees, and so they did all the programming work on the game. Jeroen and Kenny chose to develop the 3D assets and interfaces for the game. We all collaborated on the game's concept, gameplay ideas, and the many little decisions that made the game come together.

#### What has been your favorite part of the Imagine Cup competition thus far?

Seeing our project finally come together into a real playable game, after months of slow progress. Also, being selected for the finals was pretty exciting! ☺

#### How did you come up with your game idea? What personal or technological challenges did you face while developing your game?

Early on, we decided we wanted to make a fairly simple game that closely followed the theme of sustainability. Together we came up with the concept of a city sim puzzle game with educational elements and a nice 3D interface.

Apart from the many technical challenges, our greatest challenge was to get the game from a rather vague concept to a fully playable game in the limited time we had. It was always a balancing act, meeting deadlines and working on Future Flow without neglecting our other responsibilities and personal lives.

#### What experience did your team have with game development before competing in the Imagine Cup?

We are all working towards a game development degree, so we have all worked on previous game projects. These include making small 2D games in one or two-person teams, mods for existing commercial games, and many assignments to create 3D content with game applications in mind. Some of us also have experience making mods, levels, and other user-created content for games in our spare time.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to pursue a career in game development or launch a new business?

We intend to complete our bachelor's degrees in Digital Arts and Entertainment next year (June 2009). All of us intend to pursue careers in game development or film/animation. We would love to develop games like Future Flow for a living, though we do not have plans to launch a business at this time.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

Having a good time in Paris with the team and meeting the other students who took part in the competition.

#### Links to more information

Our game Web site is [www.futureflow.be](http://www.futureflow.be).

#### Game Screenshots





Brazil



## Mother Gaia Studio

Team Members

Guilherme Campos  
Helena Van Kampen  
Rafael F. Costa  
Túlio Sória

Mentor

Eduardo Morgado

### Game Title City Rain

#### Game Overview

Imagine a world where everybody is aware of environmental issues and respects our planet. Our game, City Rain, provides this world to players by teaching them precious lessons about urbanism, ecology, and a sustainable environment.

City Rain can be used as a teaching tool to make K-12 students aware of environmental issues. Because our game has several difficulty levels, it can be slow and smooth so the players can learn, or fast and challenging so the players can test their skills and compete with their friends. With the XNA Framework technology provided by Microsoft we can teach in the best way: Students can learn while having fun. Mother Gaia Studio wishes to make youth aware of how to make ours a better planet.

#### Technology/Software Used

- DirectX SDK
- XNA Framework 2.0
- Microsoft Office Project 2007
- Visual Studio 2005
- Adobe Photoshop® CS2
- Adobe Illustrator® CS2
- GraphicsGale
- Audacity

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Game Development invitational?

We wanted to create something that contributes positively to the world, and hopefully even changes it. The opportunity to learn, to gain professional recognition, and to create something useful to our society. For all these reasons we chose Game Development. And also, each of our team members liked the idea of creating a game by starting from a raw idea, polishing that idea, and finally turning it into a reality. A completed game is tangible and offers interesting technical challenges, which we looked forward to overcoming. Finally, the exigency of delivering a full game at the Worldwide Finals forced us to focus on making bug-free, complete software.

#### Background on your team: Who are you and how did you meet?

Guilherme and Tulio, who study together, were talking about participating in the Imagine Cup, because both of them like games and wanted to show the world their creativity. But they knew that the two of them couldn't achieve this goal on their own.

Fortunately Tulio just knew the right programmer to help them on this project: Rafael, Tulio's childhood friend. They were just starting to search for a designer when Helena, LTIA's newcomer, showed up and had the characteristics they were looking for.

#### What has been your favorite part of the Imagine Cup competition thus far?

The opportunity to create an innovative project that could help society learn environmental lessons and, at the same time, to enjoy the rewards of our efforts spent developing our creative idea.

#### How did you come up with your game idea? What personal or technological challenges did you face while developing your game?

We were looking for something that would be an innovative game and that would break "paradigms."

Then we thought about uniting puzzle and strategy elements, making a game that would be funny and could teach the players about environmental lessons.

The technological challenges we encountered were mainly that we didn't have the proper equipment (controllers, graphic cards, monitors, etc.).

#### What experience did your team have with game development before competing in the Imagine Cup?

All our members had little experience in game development. What we did was restricted to small "academic" projects.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to pursue a career in game development or launch a new business?

Independent of the results, we are planning to pursue a career in Game Development. We're also looking forward to creating and launching new and even better games!

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to learning more about Game Development, talking to the others finalists, and meeting important people who are experts in Game Development. We want to make business contacts to get resources (human and capital) for our next games. And we also want to have a great time in France.

#### Links to more information

[www.cityra.in](http://www.cityra.in)

#### Game Screenshots





## France

### ECOThink

#### Team Members

Nicolas Gryman  
Frédéric Pedro  
Maximilien Paitel  
Anthony Chen Kuang Piao

#### Mentor

Mauricio Diaz Orlich



### Game Title Ecological Tycoon

#### Game Overview

In a world where taking care of the economy often causes ecological damage, Ecological Tycoon is a game that's centered on lasting development. In other words, it offers the player a way to manage every aspect—economic, ecologic, and human—of a real or fictional society (Japan, la Réunion Island, France, Love Island, or USA) by giving an interdependent statistics system. The population behavior will give you its environmental realization (waste, etc.); its social class and evolution will have impact on its housing, its quality of life and levies, etc. We clearly put forward the documentary and pedagogic contents. The geography of every map is respected and every city contains real information: a photograph of a monument, the name of the mayor or the real number of inhabitants. The player can also inquire about the situation using the ecologic library with several themes. Pedagogic does not mean boring and we apparently put the fun in the centre of the gameplay (minigames, events, etc.), with its sound and graphic world oriented pixel art, the research system, more than 40 different buildings to be constructed, and much more.

#### Technology/Software Used

- DirectX SDK
- XNA Game Studio 2.0
- Visual C# 2005 Express Edition
- Adobe Photoshop
- Paint.NET
- Microsoft Office Word, Microsoft Office Excel®, Microsoft Office PowerPoint®
- Mindjet Manager
- Tortoise SVN & Track

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Game Development invitational?

We have been following the evolution of the Imagine Cup for a few years. Previously, we had little time to invest in it. The competition was very directed toward technical skills (IA for Project Hoshimi for example). The Game Development category, new this year, adds a creative opportunity to the Imagine Cup. Our game is thus carried by a particular graphic and sound universe. Impassioned by game development, the invitational enabled us to quickly obtain what we were expecting. Putting together "video games" and "sustainable development" was an exciting subject.

#### Background on your team: Who are you and how did you meet?

Maximilien, Frederic, and Anthony were first year students of the cycle engineer of SUPINFO. Nicolas finishes his course this year. Frederic and Maximilien studied together for two years at SUPINFO Bordeaux and always worked together on various projects (Web site, school projects, etc.). Frederic and Nicolas met during the creation of the SUPINFO XNA laboratory. Then Maximilien went to London and Frederic to Paris. There he finally met another student of his class: Anthony. ECOThink was born!

#### What has been your favorite part of the Imagine Cup competition thus far?

There are many things we really enjoyed during this competition. The French event at Marcoussis where we were able to meet the other French teams motivated us a lot. Thanks again to Microsoft France! Little by little, we began to believe in our project and in this adventure and the group was welded. Each time we went further: the moment we passed the Round 2, the selection for the French final, and finally the world final! It was amazing!

#### How did you come up with your game idea? What personal or technological challenges did you face while developing your game?

We love strategy games: the Civilization series, Sim City, and Caesar clearly inspired us. They offer a true depth of play and that was essential for us in order to transmit a message to the players. We had to face several technical and human challenges. XNA being a young framework, several points handicapped us such as the absence of GUI, but it was easy to use and that really enchanted us. The statistical part and simulation were very difficult to integrate. For the human part, the distance between the members of the team and the lack of time for some allowed us to organize only one meeting face to face! That has brought problems of communications but we managed to go through it by improving our organization.

#### What experience did your team have with game development before competing in the Imagine Cup?

Only Nicolas had a true technical background in the development of video game. He was in particular invested on several amateurs' productions. After 4 years in the specialized press, Fred worked part time this year as an Associate Producer. The graphic designer of the team, Maximilien, began his training as an autodidact on the Web two years ago. Lastly, Anthony was a neophyte in IT when he decided to join the project but had a good mathematics culture.

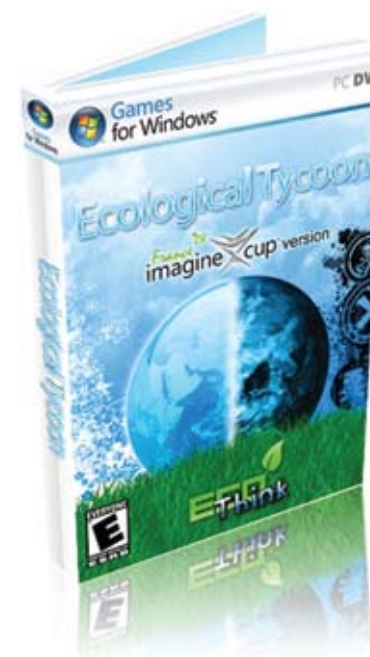
#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to pursue a career in game development or launch a new business?

We will create a new studio named "ECOThink." We are actually producing a business plan and working on a new version of Ecological Tycoon with improved "next gen" graphics and a deeper gameplay. The Imagine Cup prototype represents today a little less than 10% of our objective. Also, we are looking for a publisher and partnerships with ecological associations.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We've followed the evolution of the other finalist projects and they all seem to have enormous potential. We are looking forward to meeting new people as impassioned and full of ideas as we are. We also hope that by presenting our future project, we'll obtain new contacts that will help us continue working on it.

#### Game Screenshots





## Germany



### BAAM! Studios

Team Members  
 Jochen Isensee  
 Florian Mätschke  
 Martin Wahnschaffe

#### Game Title Imagine Earth

##### Game Overview

Imagine Earth is an Earth simulation game. Your main goal is to build up a huge population within a healthy environment.

To achieve this you can build different constructs, like cities, power plants, farms, and industry areas and place them on a 3D Earth which is segmented into many fields. In the course of the game, pollution will become a big problem. Some of your buildings pollute the surrounding ground, others pollute the air.

Research helps to develop new technologies that reduce this pollution. For example you can advance your city with new recycling techniques or build modern power generators. There are many more ways to create a sustainable environment, but if you choose to ignore them there will be much bigger problems you'll have to deal with:

- Global warming will melt the polar caps and raise the global sea level
- Hurricanes will destroy your cities and forests.

Your rising population, the growing number of cities and their increasing hunger for goods, energy, and food will force you to massively expand your production capacities. You have to take care that you don't go beyond the scope of your planet's capabilities.

The final challenge is to compete with other players all over the world in an online high score. You will be forced to decide what the best balance of growth and environmental equilibrium is, in every single moment of gameplay.

##### Technology/Software Used

- Visual Studio 2005 Professional and Express
- XNA Game Studio 2.0
- Notepad++ 4.9.2
- Cinema4D R10.5
- Adobe Photoshop CS2
- Paint.NET 3.22
- Tortoise SVN 1.4.6

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Game Development invitational?

We saw the German Imagine Cup Software Design finals at the STC 2007 and decided to take part in 2008. While reading the rules for the Imagine Cup 2008 we noticed the Game Development competition and instantly knew that we want to take part.

##### Background on your team: Who are you and how did you meet?

Florian Mätschke and Martin Wahnschaffe are Bachelor of Science Informatics students at the Technical University Brunswick. We met each other with Jochen Isensee during a cooperative project with the University of Art Brunswick. Together we formed a team of two programmers and one graphics designer.

##### What has been your favorite part of the Imagine Cup competition thus far?

The fact that we made it into the finals!

##### How did you come up with your game idea? What personal or technological challenges did you face while developing your game?

Inspired by the Imagine Cup theme we decided to make a game that shows the effects of environmental pollution in an immediate way. In the real world these effects take years to become obvious. In our game you can experience this development in a few hours and furthermore you will learn how to deal with it.

##### What experience did your team have with game development before competing in the Imagine Cup?

We developed a mobile game in our previous semester that gave us a little experience. Our designer also worked on a medieval Unreal mod. Of course we all are passionate gamers who have played computer games since our childhood.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to pursue a career in game development or launch a new business?

Primarily we will continue our studies. This gives us enough free time to continue our work on Imagine Earth and make it more public. To work in the game development industry later on is a very appealing idea.

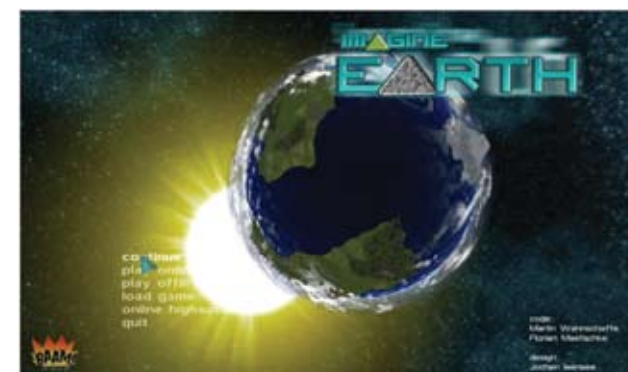
##### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are really looking forward to meeting the other five Imagine Cup Game Development finalists and to playing their games. Furthermore we think that we all will have six great days in Paris.

##### Links to more information

<http://imagineearth.qsh.es>

##### Game Screenshots





## Germany



### SiSS

#### Team Members

Frank Götz  
Ingo Köster  
Florian Leckebusch

#### Mentor

Jörg Stöcklein

### Game Title Megalopolis

#### Game Overview

In Megalopolis the player is a robot who has control over the ecological and economical growth of an island. The player tries to get the highest score by managing the island for ten virtual years (ten minutes). He will have to build power plants and the most efficient living conditions for the human inhabitants. The player has to keep a good balance between quick expansion, income, and environmental sustainability. Your ultimate score is determined by the number of people living on your island and the carbon dioxide emission level at the end of ten minutes.

The player explores the basics of our ecologic system and especially how high carbon dioxide emissions will destroy Earth and its people. Since it is an arcade style game a broad audience will have access to it and the message will sink in easily in without being at all patronizing. So the game hits the theme of the Imagine Cup in two ways: First of all the player is focused to find the best way to bring ecology and economy together and second as a tool itself: it makes the players more aware of the ecological risks our generation is facing today.

#### Technology/Software Used

- Visual Studio 2005
- XNA 2.0
- Resources from XNA Creators Club
- Paint .NET 3.05
- Audacity 1.2.5
- Omnigraffle 4.2.2
- Xbox 360®
- Subversion 1.4
- Protracker 2.3d

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Game Development invitational?

We heard of the competition very late and had to quickly assemble a prototype of our game idea. We are always looking for competitions to take part in as they offer a chance to become known by game publishers worldwide. The ecological theme of the Imagine Cup was something you do not expect normally when making games, so it set our brains in motion when we started thinking of a game idea that would fit the theme and still be fun to play.

#### Background on your team: Who are you and how did you meet?

Frank Götz has a diploma in computer science. He is a doctoral student at the University of Paderborn. His research activities are Web3D technologies. Ingo Köster just received his diploma in applied computer science. The subject of the diploma was the implementation of a distributed physics-engine using the XNA Framework and the Xbox 360. Florian Leckebusch studies Communication Science, Political Science, and Ancient History at the University of Münster. Being long-time friends and passionate gamers, we realized that our diverse skill-set enabled us to make games on our own. We have been pursuing the dream of building our own game development company since 2006.

#### What has been your favorite part of the Imagine Cup competition thus far?

The excitement of competing and even winning with so many creative groups in such a large scale competition is simply overwhelming.

#### How did you come up with your game idea? What personal or technological challenges did you face while developing your game?

The idea came up when we looked at a map of J.R.R. Tolkien's Middle Earth and spoke about map making and how it could make for a good game design. We saw woods on the map and they instantly became one of the key game elements. We tested the whole game as a board game first and then wrote down our design document.

#### What experience did your team have with game development before competing in the Imagine Cup?

This is the second competition we've taken part in and both were aimed at the Xbox Live Arcade market with the XNA development platform. Both have been interesting and taught us a lot about game development and teamwork in general. The first competition was Microsoft's Dream-Build-Play in 2007, where we participated with a slightly larger team. Our entry was a toy-plane-style flight game with an end user editor for outfitting rooms to play in.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to pursue a career in game development or launch a new business?

We do indeed have plans to build our own game development company and to recruit some creative spirits out there to strengthen our team and develop for the XBLA-market. We like the way small teams can still participate with their own game ideas—not leaving the whole market to the big fishes out there!

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

Meeting the other competitors, exchanging experiences, and making new contacts. Cheers!

#### Game Screenshots



Screenshot of level 1: high CO2 emission caused natural disasters.



Screenshot of level 3: the radial menu is used to select a forest, reforestation is essential to manage the CO2 emission.







## Korea



### GOMZ

Team Members  
Kim Dong Hoon  
Kim Ki Hwan  
Park Min Kyu

### Game Title CleanUp

#### Game Overview

This game starts with the polluted earth. CleanUp is composed of cubes which show real parts of the earth. Both living creatures and pollutants exist in this Cube. Our team imagined a hero who can convert pollutants into energy. A hero needs Cleaners which enable him/her to convert pollutants into energy. So the player should move actively while playing this game to get the Cleaners in all the Cubes. Through the player's effort, the environment can be sustainable and keep the earth's healthy environment. Converted energy is used to improve the environment and create a cleaner perfect environment where the Cleaner is not needed anymore. The technology to help reduce pollutants and purify pollutants will show us the future that people imagine. Our sincere thoughts and actions in this technology should always work together to protect our world.

#### Technology/Software Used

- Microsoft C# Express 2005 Edition
- XNA 2.0
- Maya 8.5
- Adobe PhotoShop 7.0
- Adobe Illustrator 10.0

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Game Development invitational?

We believe that game development area is the area that we can realize the world of imagination with software technology. For these reasons, GOMZ team has been interested in the area of game development since our first meeting. The news that the Game Development area would be offered in the Imagine Cup made us very excited. We began to study the XNA platform and brainstormed to come up with good ideas. The XNA platform provided us with the environments to make a game easier and faster.

We believe that we can express our messages through this game and we can change and create innovative solutions in our world directly and indirectly. We intended to express our stories about environment which is also the theme of the 2008 Imagine Cup.

#### Background on your team: Who are you and how did you meet?

Our team consists of three members:

- 3D engine programmer Kim Dong Hoon
- Scenario and Flow director Kim Ki Hwan
- Designer Park Min Kyu

The GOMZ team was set up to participate in the game contest in Korea. Our first work was a small-sized MMORPG based on engines that we made on our own but we failed. The lesson that we learned from this experience is "the game should be interesting." So we got together again for the Imagine Cup to make an even better game!

#### What has been your favorite part of the Imagine Cup competition thus far?

The best thing about the Imagine Cup is that it gives us a goal and a reason for our game. It is very hard to finish the game development without a goal and reason. The Imagine Cup Game Development competition is divided into 3 rounds and we learned how to set up the goal and process to pass the next round. Also we had several workshops with Microsoft and professional game developers and got a lot of great advice on how to improve so we achieved a higher level.

#### How did you come up with your game idea? What personal or technological challenges did you face while developing your game?

Our game idea was inspired when our members ate cheesecake in the cafe. The idea came up to our head when we saw the same fragments of the cake. We thought that if we could module the earth's environment, it would be a very interesting concept. From this idea, we made cubes with fixed size that reflected the real environment of the Earth. Each cube reassembles and goes through new changes. Through this, we solved our problems about the efficiency of development which is suitable for the concept of our game.

#### What experience did your team have with game development before competing in the Imagine Cup?

We believe that the Imagine Cup is not the end of our journey. After the Imagine Cup we would like to improve the quality of the game and go through many experiences. We would like to show the world what we have done. In order to let many people know what we have done, we want to provide a service through the XBOX LIVE arcade. We are certain that these will become precious experiences. Finally, we want to share our precious memories with many programmers and designer after the Imagine Cup.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to pursue a career in game development or launch a new business?

We do indeed have plans to build our own game development company and to recruit some creative spirits out there to strengthen our team and develop for the XBLA-market. We like the way small teams can still participate with their own game ideas—not leaving the whole market to the big fishes out there!

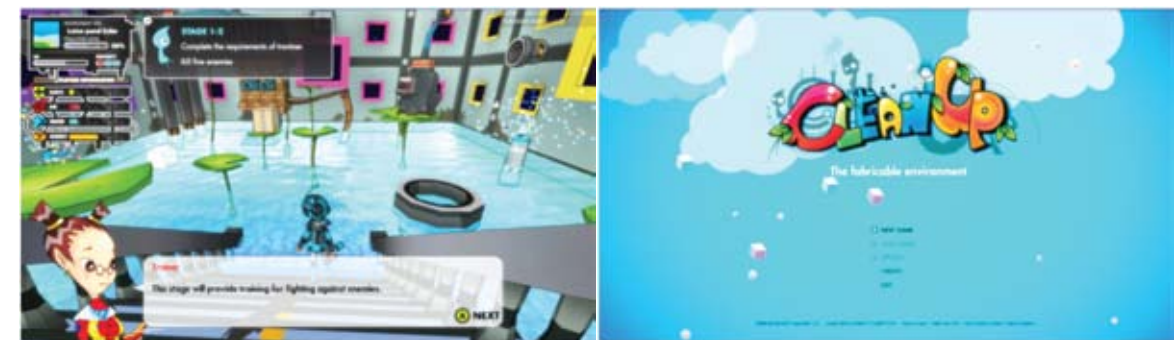
#### What are you most looking forward to experiencing at the Worldwide Finals in France?

To begin with, we would like to meet many people from all over the world and we want to show OUR GAME. Through this, we hope to learn a lot of things from others and give good inspirations and information to others. Finally, we would like express our messages to the world that we have to take care of our environment to sustain ourselves.

#### Links to more information

Official game homepage and blog: <http://ideawork.kr/CleanUp>

#### Game Screenshots





## Skills Challenges



## Project Hoshimi

Imagine that you are the only one who can save a person, a city, or even a nation—and that you can use the right combination of strategy and programming skills to do this. The Project Hoshimi Programming Battle invitational brings to life the world of Professor Hoshimi and his faithful crew of scientists and programming experts in a fantasy of life and death. This popular competition uses a background story, comic style graphics, and very real challenges to test the skills of programmers everywhere. It allows them to compete directly online, with people all over their nation and eventually the world, to see who has the fastest program to save the day. In the Project Hoshimi Programming Battle, you write the code representing the behavior and the strategy for the team of characters going through different types of missions. The results are not only fun to create but also fun to watch as the programs play out in a virtual 3D environment for all to see.

## Argentina



### Chemical Brothers

Team Members  
Carlos Miguens  
Cristian Pereyra

Mentor  
Pablo Gauna

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Project Hoshimi Programming Battle invitational?**

We were inspired by last year's first place win of Argentina's team OIA in this same category, and also by some other Hoshimi competitions at the high school level here in Argentina, called Gaming.NET. Since this competition uses the same SDK as the Imagine Cup, I (Cristian) decided to create a new team for this competition. I knew that Carlos was the person to choose, because I needed to know how to design a more complex and scalable software than in Gaming.NET. I knew he'd be key in solving our problems in a 24-hour competition.

**Background on your team: Who are you and how did you meet?**

We met as high-school students at Hogar Naval Stella Maris (located in Floresta, Buenos Aires). But Carlos finished high school in 2002, and now he's studying informatics engineering in the Universidad de La Matanza. We met each other when Carlos was a lecturer at some after-school classes of OOP and Java, which is the language he has the most knowledge in. I am in my last year of high school, which is oriented in computer programming.

We quickly became friends and sometimes we feel that we are like brothers (that's how we came up with our team name).

**Team Experience: What experience did you have with programming previous to competing in the Imagine Cup?**

Carlos is the most advanced here I must admit, he is senior in the Java programming language. He has more knowledge of complex systems so he has fewer problems when things are difficult.

I started with Pascal, C/C++ in school and then I started with C# in the first Gaming.NET competition, where I didn't carry on with OOP so my strategy wasn't good enough. But next year after learning C# more, I learned a lot about how this competition's SDK works and how to make a strategy to win.

So, sharing our experiences we developed our strategy for this competition.

**What has been your favorite part of the Imagine Cup competition thus far?**

We would say simply two words: To qualify. But, seriously we think it was the fact of having to overcome ourselves at all times. I will put Carlos's words here to simplify what we both thought during all of the competition, "The only competition must be with ourselves." We always thought we could make it, but we also knew there were other really good teams and that perhaps we would need luck since this competition requires a bit of it sometimes in some matches.

**Describe a challenge you faced while competing in the Project Hoshimi invitational.**

When you have something good, how can you make it even better? That was always our question and our problem, even today after qualifying we still have things to polish.

**What do you plan on doing after the Imagine Cup finals in France?**

We would both like to go on with our studying courses, and find more challenging and comfortable jobs.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

Since we'll have to program for the first 24 hours, we'll make the best of that time, and after that, no matter what the results are, we will enjoy Paris, which we know is such a beautiful and colorful city!

## China



### Zephyr

Team Members  
Peng Guo  
Jiaze Huang

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Project Hoshimi Programming Battle invitational?**

The Imagine Cup is a competition for talented people all around the world. It helps us to gain competency as well as create contacts for our future professional life.

We love to play War3 against others, and the Project Hoshimi Programming Battle is just the competition we want.

**Background on your team: Who are you and how did you meet?**

Last year we attended a RoboCup competition, and since then, we became team mates and good friends.

**Team Experience: What experience did you have with programming previous to competing in the Imagine Cup?**

We have participated in RoboCup Simulation Soccer 3D and RoboCup Simulation Rescue competitions. The experience we get from these competitions is really helpful for us to compete in the Imagine Cup.

**What has been your favorite part of the Imagine Cup competition thus far?**

Waiting for the result. ☺

**Describe a challenge you faced while competing in the Project Hoshimi invitational.**

Find the Bug and Fix it.

**What do you plan on doing after the Imagine Cup finals in France?**

We will be back to university to tell more students to participate in the Imagine Cup 2009. We think the Imagine Cup is a great platform for young students to unleash their potential.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We are very happy that we are invited to the Project Hoshimi World Final! We will try our best to rank in top 3.

**Links to more information**

Aaron Guo's Chinese blog: <http://gpcuser.cnblogs.com/>



## Czech Republic



### Gold Fusion Team

Team Members  
Lukáš Perůtka  
Imrich Živčák

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Project Hoshimi Programming Battle invitational?**

Two years ago we attended a Microsoft presentation for students called "Microsoft Fest," about new technologies, and we were introduced to the Imagine Cup. We said that "we will try it for fun!" 😊 Project Hoshimi was a perfect match for us. It's an interesting category, you can test yourself in creating a really challenging strategy, and in the end you can see how your strategy is doing against other teams all over the world. Last year was successful for us—we went to Seoul in Imagine Cup 2007, so we tried again.

**Background on your team: Who are you and how did you meet?**

We are students at Charles University in Prague, Faculty of Mathematics and Physics. Lukáš is studying Mathematics and I'm studying Computer Sciences. We met as roommates at the school dormitory. In time we created a very good friendship and of course Gold Fusion Team at Project Hoshimi in the Imagine Cup. 😊 It brought us to finals in Seoul, South Korea, and now to Paris! 😊

**Team Experience: What experience did you have with programming previous to competing in the Imagine Cup?**

We had experience in C++, C#, and other languages before competing in the Imagine Cup. Project Hoshimi gave us an opportunity to work together. We tested our previous programming experience and enjoyed it a lot.

**What has been your favorite part of the Imagine Cup competition thus far?**

It has definitely been last year's World Finals in Seoul, South Korea.

**Describe a challenge you faced while competing in the Project Hoshimi invitational.**

We had lot of work at school so it was little bit hard to synchronize all these things together. And of course this year's competitors are tougher.

**What do you plan on doing after the Imagine Cup finals in France?**

Rest. 😊

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We are looking forward to experiencing the Imagine Cup atmosphere, fun, people from all over the world, and Paris of course.

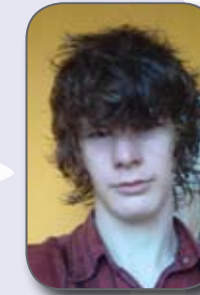
## Czech Republic



### OrangeEvilMouse

Team Members  
Marek Skotnica  
David Fišer

Mentor  
Pavel Čáp



**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Project Hoshimi Programming Battle invitational?**

I saw the Imagine Cup poster somewhere so I looked up the [www.imaginecup.com](http://www.imaginecup.com) Web site. Project Hoshimi was the best choice for me because I like strategy games a lot. Also I had some experience with programming AI so I formed a team with my friend and started programming.

**Background on your team: Who are you and how did you meet?**

We are students at the High School of Applied Cybernetic in Hradec Kralove in Czech Republic. We are classmates.

**Team Experience: What experience did you have with programming previous to competing in the Imagine Cup?**

Before the Imagine Cup I had about 4 years of experience with programming and about 2 years in C# .

**What has been your favorite part of the Imagine Cup competition thus far?**

Waiting for the results and talking with people online in the Project Hoshimi forum. There are a lot of interesting people.

**Describe a challenge you faced while competing in the Project Hoshimi invitational.**

The best challenge was bugs and source optimization. It was a nightmare sometimes. I've spent a lot time debugging dumb things. The second challenge was the strong competition; a lot of the students are studying in a university and have a lot more experience with programming.

**What do you plan on doing after the Imagine Cup finals in France?**

I plan to enjoy my summer holidays. And next year, I want to try competing in a new category of the Imagine Cup.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

I am looking forward to seeing the interesting city of Paris and also to meeting a lot of professional programmers. And maybe getting some job offers there..



## Russia



### RedDevils

Team Members  
Ilya Grebnov  
Sergei Grebnov

Mentor  
Régis Hanol (France)

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Project Hoshimi Programming Battle invitational?**

We chose the Project Hoshimi Programming Battle invitational because we know our potential and this nomination is really interesting for us. Also it is the good way to show our programming skills and experience.

**Background on your team: Who are you and how did you meet?**

We are brothers from Russia. We enjoy programming and doing great things. Ilya is mostly specialized on complicated and non trivial algorithms and Sergei is good in technical aspects.

**Team Experience: What experience did you have with programming previous to competing in the Imagine Cup?**

We succeed in programming competitions like ACM, TopCoder, others. Now we are working as software developers in some good companies in our region. Last year Ilya was in final round of the 2007 Imagine Cup in South Korea. That was very exciting and he was inspired again. Concerning Sergei it is the first time he has participated in the Imagine Cup final round.

**What has been your favorite part of the Imagine Cup competition thus far?**

We have no doubt about the best part. Of course, it is the Imagine Cup Russian regional final: a lot of fun and new experience. It was really cool. 😊

**Describe a challenge you faced while competing in the Project Hoshimi invitational.**

The main difficulty we've encountered is a lack of time that is needed for implementing and approving all of our ideas.

**What do you plan on doing after the Imagine Cup finals in France?**

We are postgraduate students and after the Imagine Cup final we are going to finish our postgraduate studies. After that Ilya plans to find a job in a big company like Microsoft and Sergei is thinking of creating a startup.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

We have never been in France before and we would really like to see Paris and especially the Eiffel tower, because there won't be such opportunity in the near future. Also we are looking forward to meeting our French friends.

**Links to more information**

<http://RedDevils.weblog.com/>

## Ukraine



### Dream Team

Team Members  
Pavlo Liapota  
Margaryta Skrypachova

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Project Hoshimi Programming Battle invitational?**

We like to participate in the different contests, so when we saw such a competition from Microsoft, we decided to take part in it too. The Project Hoshimi Programming Battle is, we think, the most interesting and original competition.

**Background on your team: Who are you and how did you meet?**

We are third year students of Kharkov National University of Radioelectronics of Computer Science faculty. We are active and like to take the initiative and compete. Both of us were interested in the ACM contests, so we met and made friends. From that time we compete in all the competitions as the one team.

**Team Experience: What experience did you have with programming previous to competing in the Imagine Cup?**

We had programming experience in C++, Java, .NET, and PHP.

**What has been your favorite part of the Imagine Cup competition thus far?**

To take part in small competitions and to watch how your strategy gradually gains all the qualities needed to win.

**Describe a challenge you faced while competing in the Project Hoshimi invitational.**

The competition of this type was novelty for us, and at first we couldn't manage our work correctly. But happily there was enough time and we did it!

**What do you plan on doing after the Imagine Cup finals in France?**

We are going to continue participating in the different interesting contests.

**What are you most looking forward to experiencing at the Worldwide Finals in France?**

The exciting spirit of competition and the taste of the winning, and of course to dive into the fascinating world of Paris.

**Links to more information**

<http://www.topcoder.com/tc?module=MemberProfile&cr=22650894>

<http://www.topcoder.com/tc?module=MemberProfile&cr=22651137>

<http://vkontakte.ru/id1414573>

<http://vkontakte.ru/id1382222>



## IT Challenge

The IT Challenge Invitational highlights the art and science of developing, deploying, and maintaining IT systems that are efficient, functional, robust, and secure. In most scenarios IT professionals have a base set of tools and techniques, but still have to work through custom needs and configurations that require an intimate understanding of how all the pieces fit together. They also have to know how far the systems can be pushed before they might break. This means that every coffee shop, office environment, university, and even restaurant requires employees who are expert in these skills for it to run well. The six finalists in this category have already demonstrated great proficiency in the science of networks, databases, and servers, as well as the areas of analysis and decision making in IT environments.





Brazil



Cabral Valverde

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the IT Invitational?**  
The challenge itself is a great source of motivation. The Microsoft Imagine Cup had always seemed to me (even before I could compete) like a wonderful opportunity to put my technical skill to the test and to practice and learn by solving real-world problems. It's more than technology for its own sake.

The IT Invitational was an obvious choice for me, since I have always been passionate about servers and the infrastructure behind everyday activities and services. The complexity of a simple Web search is much huger than one might realize from just looking at the results. The beauty in this infrastructure is just that: It is invisible to users, and, most importantly, easy to use, despite its complexity. Building this kind of solution, and services like this possible, is what inspired me to compete in this invitational.

**What has been your favorite part of the Imagine Cup competition so far?**

My favorite part of the competition so far was definitely the second round. As opposed to the first round, there are many more variables and decisions to be taken when writing a Business Case than when simply answering a quiz. Even though it was more challenging, Round 2 turned out to be much more fun, since there were lots of possibilities, there was no single right answer, and it was up to the competitors to choose what was best. This kind of decision-making closely matches real-world situations.

**What emerging technology interests you? How do you think it will change our daily lives?**

While virtualization is no longer what can be considered an "emerging technology," I believe there is much yet to come from this area. Virtualization enables much more efficient usage of hardware, which brings many benefits, from savings in equipment, electricity consumption, and staff, to a smaller carbon footprint.

Virtualization is not just for servers, though. This technology is yet to be adopted in the home user market, where it will probably turn out to be a great solution for cross-platform interoperability, invisible to the end users. Looking at the software-as-a-service model, application and presentation virtualization are already essential for the seamless delivery of this kind of product.

Soon enough, I believe we will see virtualization tightly integrated with every major operating system, out of the box, a prediction that is already becoming reality with Hyper-V™ and Windows Server 2008. This will extend to desktop operating systems really soon as well.

**What are you most looking forward to about the worldwide finals in Paris?**

First, I'm looking forward to the competition itself. Next I am looking forward to finally meeting my fellow competitors, since I believe I'll have a valuable opportunity to exchange knowledge with people who share my interests. Every invitational has a strong appeal to me, and I would definitely like to check all the other finalists' work out. I'm especially interested in seeing the Software Design invitational finalists' projects.

**What do you plan to do after the Imagine Cup finals?**

I will resume my personal and professional projects, which include entering college, obtaining a MCSE/MCSA certificate, and working directly for a technology company. The competition will surely help me reach these goals, regardless of the results. While elaborating my Round 2 entry, I realized that, besides competing, there is a lot of learning involved in the Imagine Cup, and no one loses by learning.

China



Yan Liu

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the IT Invitational?**  
I am good at IT, and the Imagine Cup provides a chance for me to show my talent, so I chose to compete in the IT Challenge.

**What has been your favorite part of the Imagine Cup competition so far?**

In order to improve the design of my IT Infrastructure, I had to rack my brains to put out several diagrams. Unexpectedly, when I had finished all my diagrams, I discovered my art capability had been improved by leaps and bounds: that is, from zero to little.

**What emerging technology interests you? How do you think it will change our daily lives?**

I think that Unified Communications will be one of the most important information technologies in the next few decades, which most interests me.

The unified communications theory believes that employees' core productivity is represented in his abilities—to acquiring, sharing, and applying the information, namely the business value. Unfortunately, only Bill Gates realized this 25 years ago.

**What are you most looking forward to about the worldwide finals in Paris?**

There are so many clever people in the Worldwide Finals. I love clever people.

**What do you plan to do after the Imagine Cup finals?**

I'm planning to learn a pile of new technology.





China



Jiahui Wang

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the IT Invitational?**  
The Imagine Cup is a good stage for our students to show our abilities. In this competition, we meet really smart people from many places around the world. It is a very good chance for us to communicate with people coming from different cultures. And I like the IT Challenge just because it is exciting for me, and, Microsoft has so many good products to help people have a better life. So I decided to learn how to use all of these products, and then, I joined the IT Challenge Competition.

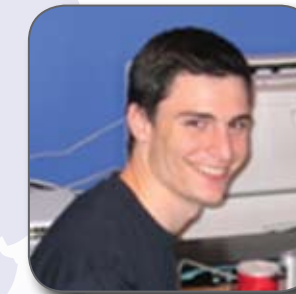
**What has been your favorite part of the Imagine Cup competition so far?**  
The IT Challenge is an amazing competition. I think the second part of the whole competition is more exciting. In about three months, so many things need to be done to create a proposal that meets specified requirements. It makes me really happy when my proposal was ready to be sent to the judges.

**What emerging technology interests you? How do you think it will change our daily lives?**  
Windows Server 2008 has so many new interesting features. And, it is easy to use. I believe Windows Server 2008 will provide a better experience for IT Pros, to help them provide more services to everyone.

**What are you most looking forward to about the worldwide finals in Paris?**  
Paris is a beautiful city, I am glad that Microsoft choose Paris to hold the worldwide final competitions. I am looking forward to having a wonderful time there.

**What do you plan to do after the Imagine Cup finals?**  
My hometown is Beijing. So I will watch Olympic Games after returning from Paris. At the same time, I hope that as a result of the Olympics, more and more people will come to know and like China.

France



Jean-Benoit Paux

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the IT Invitational?**  
The Imagine Cup is a great competition, recognized for the high level of its competitors. Entering in this competition enabled me to test my knowledge and share problems, their solutions. It is a worldwide competition so we can meet students all around the world. I chose the IT Invitational because this is my specialty and the domain in which I'd like to work after my studies.

After last year's Worldwide Finals, I said "I'll be back!!" I knew the level would be higher and thus I gave all I could to be qualified.

**What has been your favorite part of the Imagine Cup competition so far?**  
Writing the Round 2 business proposal is the most interesting part. You have to imagine services to deliver to the hypothetical company, search how to implement them, and the most important—justify why they need this service and how it is relevant. To do this, you have to read a lot and look around to see what already exists. I spent a lot of time this year on the Microsoft Research Web site to discover their projects, how can we adapt them for the project. Very interesting!

**What emerging technology interests you? How do you think it will change our daily lives?**  
Unified Communications (UC) and ambient computing are two technologies in which I'm really interested. In Round 2 we tackled the UC with Microsoft Exchange Server 2007 and Microsoft Office Communications Server 2007 and I'd really like to use it every day. UC will make our work very easier: no need to travel to assist meetings, access to information everywhere, etc., but it mustn't cut people off from seeing each other.

The other technology I discovered this year was sensor networks and RFID technologies. These little sensors can provide us a lot of services like environmental or mechanical structure monitoring and analysis.

**What are you most looking forward to about the worldwide finals in Paris?**  
The Finals last year were awesome. I do not expect less this year, particularly the parties. I'll really enjoy meeting the two other finalists from 2007 in IT and the three new finalists. Paris is a wonderful city and I know the other finalists will enjoy it.

**What do you plan to do after the Imagine Cup finals?**  
I'm in my last year at school so I'll start working after some holidays.







Romania



Andrei Alexandroni

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the IT Invitational?**  
I was inspired to enter the competition because it is the most important and challenging competition that fits my area of interest. Participating in the Imagine Cup competition last year encouraged me to compete again. I considered it a great opportunity to see how my skills have evolved over the last year, to see what are the areas where I achieved most, and where I need to develop my skills more. Another reason to enter the competition was the desire to qualify for the final round, which is the greatest chance to measure my skills.

**What has been your favorite part of the Imagine Cup competition so far?**  
So far, the best part was developing the case study for Round 2. It was a real challenge for me thinking on how to apply the most convenient technologies for the case study provided. Additionally, it allowed me to get more knowledge about the latest technologies from Microsoft.

**What emerging technology interests you? How do you think it will change our daily lives?**  
I think that in the next few years technologies enabling us to make better use of energy will be of great importance. One of the most interesting technologies here is virtualization, which could change our lives by maximizing energy consumption (and thus making a step in maintaining a sustainable environment). Also, reducing overall costs will be an important consideration for more and more organizations to implement such technologies.

**What are you most looking forward to about the worldwide finals in Paris?**  
The 24-hour competition will surely be a great experience for me from which I'll have a lot of things to learn. So, I will try to do my best during the competition. Also, I'm looking forward to meeting the other competitors, and to seeing beautiful Paris.

**What do you plan to do after the Imagine Cup finals?**  
After the finals, I plan to go on a holiday, and then start working full time as I'll finish my university studies.

Romania



Cosmin-Viorel Ilie

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the IT Invitational?**  
This is my second year of participating in the Imagine Cup IT Invitational. Last year I had a great time at the Finals but felt that I could have done better so I promised myself that no matter what, I'd get there again and have another go at it, so here I am.

**What has been your favorite part of the Imagine Cup competition so far?**  
The second round, as the completion level is much higher than the first round and everybody tries to do the best they can, read as much as possible, and have a very good business case at the end of the round. Also the hours before the finalists get displayed on the Web site leaderboards are just priceless. You can feel the adrenaline and tension on the forums, in each post.

**What emerging technology interests you? How do you think it will change our daily lives?**  
Well to be completely honest there are a couple of technologies that have emerged that made me really excited. However recently I found myself researching "green computing" and that is totally cool.

**What are you most looking forward to about the worldwide finals in Paris?**  
Well I want to have a good time there, meet some great people, take lots of pictures, visit Paris, and if possible take a "bird" home with me.

**What do you plan to do after the Imagine Cup finals?**  
Well simple, get ready for next year's competition!!! 😊





## Algorithm

The Algorithm Invitational highlights the pure skill of one's ability to solve a problem. The discovery and use of the right algorithms, together with clever implementations and application, are building blocks upon which the whole field takes collective steps forward. In our world of limited processors and limited storage there is a dire need for this art. It is through this remarkable skill that we can attempt unimaginable feats like decoding the human genome, routing millions of packets across networks, and even searching the entire Internet. The Algorithm Invitational takes competitors through a series of brain teasers, coding challenges, and algorithmic puzzles, and seeks to engage the sharpest student minds in technology around interesting problems.





Argentina



Pablo Gauna

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Algorithm Invitational?**

Last year at Imagine Cup 2007 in Seoul, Korea, I had the good fortune to be one of the Project Hoshimi finalists and I won the first place prize. Because I won the category, I couldn't participate in it again this year, so I decided to try my luck in the Algorithm category. Another inspiration is that I love solving problems of this kind.☺ So that's why this category was my favorite choice among all the options.

**What has been your favorite part of the Imagine Cup competition so far?**

I enjoyed competing in the different rounds, where you have to test your skills and develop yourself to your maximum capacities.

**How do you approach challenging problems?**

I try to divide the problem into smaller pieces so I am able to work on each piece, which diminishes the complexity of the problem.

Many times testing for errors is useful. I just try to think of something that could work, even if I'm not sure. I test it and if it's better than the previous answer, then it's done. Otherwise, I try to analyze why it didn't work. This gives you information and knowledge of the problem, so that you can improve on every try. This process is repeated tons of times until the program starts working as I want. ☺

**What are you most looking forward to about the worldwide finals in Paris?**

Several things ... the first thing, since I'm going to compete, is to be in the top 3. Also it's an amazing opportunity to get to know interesting people and improve my English. To see new places is also an interesting experience.

**What do you plan to do after the Imagine Cup finals?**

After the final, I'm planning to stay in Europe for a month and a half, to get to know some countries (France, Spain, Italy, and England), and visit family and friends. After that, I'm coming back to Argentina to finish my studies.



China



Fuming Li

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Algorithm Invitational?**

A story about Chinese student Zhifeng Chen, who won the Imagine Cup 2007 IT Challenge, inspired me to take part in the competition. Initially, I tried to approach the Imagine Cup, from Herbert to Atmosphere, step by step. I moved up in ranking from 178th in Match 3 to 51st in Match 4 and finally, to 6th place in Round 2.

**What has been your favorite part of the Imagine Cup competition so far?**

This is the first time that I have entered the Imagine Cup and the first time that I have taken part in this kind of competition. For me, it is a totally new thing. The more I get to know it, the more I love it. I love the opportunity to compete with excellent people, learn a lot from it; and furthermore, to make friends all over the world.

**How do you approach challenging problems?**

A brilliant solution occurs to me when I am reading, walking, and even eating, just like a brainstorm. BTW, I am a day-dreamer. I dream the best result when I start to do something. That is the headwater where my passion comes from.

**What are you most looking forward to about the worldwide finals in Paris?**

I can't wait to see those excellent people, to know what they have done and how they did it. What is more, make friends, see the Eiffel Tower... All these things will be very exciting. Moreover, there is still one thing left, I really want to ensure whether Brain, our Algorithm Captain, has a large enough head to contain his brain. ☺

**What do you plan to do after the Imagine Cup finals?**

I would like to apply for an internship in companies such as Microsoft, and then take part in Imagine Cup 2009.





Hungary



Szilveszter Szebeni

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Algorithm Invitational?**

I already participated in the Imagine Cup 2007 Algorithm invitational finals in Korea. It was a truly amazing experience and this year I decided to try my best to get there again. And of course I would love to see Paris.

**What has been your favorite part of the Imagine Cup competition so far?**

The Imagine Cup 2007 finals! The 24-hour competition itself was very challenging, having to solve a lot of different problems in a short time, while pushing your limits to the edge.

**How do you approach challenging problems?**

I try to break the problem into smaller parts. Otherwise, trial and error each time from a different perspective, until I find something that could lead somewhere and improve on that.

**What are you most looking forward to about the worldwide finals in Paris?**

I am looking forward to meeting my opponents, especially those whom I already know from last year's finals. I can't wait to feel the unique Imagine Cup atmosphere.

**What do you plan to do after the Imagine Cup finals?**

I am starting university in September, so I hope to start by putting the best foot forward: Meet new people, get into the university way of life, and participate in more competitions.



Japan



Naohiro Takahashi

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Algorithm Invitational?**

First, I was simply attracted to the award money for the Japan finalist when my friend showed me the brochure of the Microsoft Imagine Cup 2006. As I was still in a high school and didn't have much skill for programming at that time, I could make it only to Round 1. That actually motivated me to start studying programming so I could reach Round 2. And I'm still studying! So, the Algorithm Invitational was the start of my pursuit. This is only thing I can do and I love it so much. Though I had skills for other Invitionals, I chose Algorithm.

**What has been your favorite part of the Imagine Cup competition so far?**

My favorite is "Herbert" in Round 1. I love Round 2, of course, but Herbert means a lot to me because this led me to the world of programming. Even though skills such as short coding are hardly needed these days with recent sophisticated PCs, it is very enjoyable itself—to discover the regularity and try to express it in shortest and simplest process as possible.

It can be a good introduction for the people who don't know programming to enjoy it—as it was for me.

**How do you approach challenging problems?**

I always write down everything that comes up to my mind on paper first. Then I look through the paper and write down whatever comes to my mind again. And if I write down all of my ideas, I pick up information I can use and put it together. And again I look up that result and write down the possible solution for it. It goes on and on until I reach to the best solution. That's my process.

**What are you most looking forward to about the worldwide finals in Paris?**

Definitely I'm looking forward to talking with the other participants. I have communicated with some of them in the online forum and now I'm really looking forward to meeting them and talking face to face. I'm a bit worried that my English is not so good....

**What do you plan to do after the Imagine Cup finals?**

I don't have the exact plan yet. I would like to keep participating in competitions like this, challenge myself to learn more about programming, and pursue computer science to become more skilled for myself.





## Poland



**Radosław Czyż**

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Algorithm Invitational?**

I like interesting challenges, especially when solving them is entertaining.

**What has been your favorite part of the Imagine Cup competition so far?**

The Imagine Cup 2007 finals in Seoul. ☺ I hope finals in Paris will also be very good.

**How do you approach challenging problems?**

Just trying to solve them, I often try using different techniques, to find the most efficient.

**What are you most looking forward to about the worldwide finals in Paris?**

To feel again the unforgettable atmosphere of this competition.

**What do you plan to do after the Imagine Cup finals?**

Probably get back to work. ☺



## Ukraine



**Roman Koshlyak**

**What inspired you to enter the Microsoft Imagine Cup and why did you choose the Algorithm Invitational?**

I never was in Paris, and I would like to visit Paris, so this is motivation. The Algorithm Invitational was the easiest way to make it happen.

**What has been your favorite part of the Imagine Cup competition so far?**

My favorite part of the Imagine Cup competition has been that I should not do any paperwork so far.

**How do you approach challenging problems?**

Usually, I use a huge neuron network to solve such kind of problems.

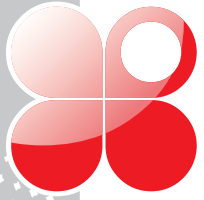
**What are you most looking forward to about the worldwide finals in Paris?**

It would be cool to see Paris.

**What do you plan to do after the Imagine Cup finals?**

Implement worldwide election reform. ☺





## Photography

Tell a story without using words. In the Photography invitational, students are challenged to communicate a story about creating a sustainable environment using only photos as the communication medium. To qualify for the Finals, students must capture a series of still photos that draw an emotional response from their audience and provoke thought and further discussion. By making a personal connection, audiences will be more informed and emotionally compelled to take action.

A sustainable environment means different things to different people and the finalists present unique and powerful perspectives on the theme. Each team educates and motivates audiences on what's at stake if we fail to act. While they tell us of the problem, they also present optimistic perspectives on how technology can create a sustainable environment.



Photography



Austria



## Team Austria

Team Members  
Rosa Maria Binder  
Benedikt Wurth

### Photo Essay Title The Spirit of Technology

#### Photo Essay Storyline

Our photo essay deals with the problem of our environment suffering from the weight of our "ecological footprint." We tried to examine how technology can help to protect our planet Earth from the impact of our actions. As a result, we realized the importance of technology that uses the power of nature. We tried to capture the spirit of that technology in our photo essay.

Sustainable technology follows three rules: first, it uses the power of nature, second it's inspired by the curiosity of a child and third, it enhances the ideas of the past. In conclusion, this technology can help us to reduce the size of our "ecological footprint" and create a sustainable environment for all of us.

#### Technology/software used

The photos were shot with a Canon EOS 350D

- Lenses: Canon 50mm, Tamron Macro 90mm, Canon 24-85mm
- Software: Adobe Photoshop CS3 Editions

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Photography invitational?

We heard of the Imagine Cup in 2007 and made up our minds then to take part in this year's competition. After we heard about this year's Environment theme we knew that we were ready to join this contest. There was no doubt that we would participate in the Photography competition since we knew immediately that this category was the best fit for our skills.

The biggest challenge for us was that we weren't just taking a single picture associated with a theme—we were creating a whole photo essay. This meant we had to do more than just use our photography skills; in order to be successful we also had to be good storytellers. We wanted to open everybody's eyes to how we might lead our world towards a sustainable environment.

#### Background on your team: Who are you and how did you meet?

Benedikt, 26, is studying at the University of Natural Resources and Applied Life Sciences in Vienna. He just got his Bachelor's degree in Environment and Biologic Resource Management. He's currently working on his graduate degree.

Rosa Maria, 25, is working on her PhD in Educational Sciences. Her Master's thesis was on the attachment of prematurely born babies to their mothers.

We met nine years ago and have been a couple ever since. We now live with our two children (Jonathan who is 7 years old, Isaak who is 10 months old) in a cozy apartment in Vienna, but we want to move to the country soon.

#### Team Experience: What experience did you have with photography before competing in the Imagine Cup?

We have had no professional education in photography. About six years ago Benedikt started taking photographs as a hobby. As a family we spend a lot of our days outside, where Benedikt enjoys himself catching the spirit of nature and portraying our children with his camera. But he also makes microscopic images, aerial photographs, and photos for advertisements.

#### What has been your favorite part of the Imagine Cup competition thus far?

One of our favorite parts of this very challenging project was working together as a team. It was fascinating to see how our ideas changed and developed. Moreover we realized that it is often essential to be flexible and work in other ways than we'd originally planned, especially at times when we found ourselves reaching own limits.

Furthermore it has been great so far to meet new people, and get in touch with different point of views about the theme. It is amazing how fast a complete stranger turns into a supportive friend.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

Our idea developed very gradually because we had to figure out how to connect environment and technology to a story that is told with pictures. In our opinion one way of creating a sustainable environment is to use the power of nature. The metaphor of the "ecological footprint" allowed us to give our essay a structure. Our time was limited, since we have two kids to take care of, and we also had to get the most out of our equipment, which proved to be restricting at some times.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career as a professional photographer?

First of all our plans include to finish our studies. We haven't planned further projects, yet, however we are sure that photography and the environment will remain an important part of our daily lives.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

First we are very excited to meet a great diversity of people from all over the world. It goes without saying that is an honor that we will be able to meet some very important people during our stay. As photographers we hope to see Yann Arthus-Bertrand. Even now, when we think of the final photography challenge in Paris, we are eager to know what we will experience. The competition is often on our minds and we think and talk a lot about it. We are very thankful for this unique opportunity.

#### Links to more information

<http://teamaustria.spaces.live.com/>  
<http://www.benediktwurth.at>





## Croatia

### Obscure



Team Members  
Jelena Balić  
Josip Bota

Mentor  
Jesenska Pibernik

### Photo Essay Title Paper Circle

#### Photo Essay Storyline

Daily newspapers and magazines use up a great deal of environmental resources. They are short-use products and they fill up a lot of dumpsites and landfills. Paper recycling is a process which uses human knowledge and technologies for recovering waste paper and remaking it into new paper products. This new use of paper has to be more sustainable than the previous one. It has to contain more ecological quality and care for the environment. The world's environment is a fragile, balanced circle, and it has to be sustained in such a way that if you create a circle with energy or material, it will last forever.

#### Technology/software used

- Canon EOS 350 d
- Canon EOS 300 d
- Canon EF-S 18-55 mm 1:3.5-5.6 II
- Canon EF 50 mm 1.8 II
- Adobe Photoshop CS2
- Adobe Photoshop CS3

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Photography invitational?

The biggest inspiration for this competition was the very important ecological issue of the theme, presented by the Microsoft representatives in Croatia, at our university. The fact that it is a student competition was another strong motivation. We chose the photography invitational because we both prefer expressing ourselves through the means of photography.

#### Background on your team: Who are you and how did you meet?

We met through mutual friends three years ago and have been in contact ever since. Now, we are colleagues and friends. After the Microsoft presentation at our university, which we both attended, we decided to enter as a team because we trust each other and know each other's qualities.

#### Team Experience: What experience did you have with photography before competing in the Imagine Cup?

This is our first team project. As individuals, we both developed a special interest in photography over the last few years, which resulted in several individual and dozen group exhibitions. Our photos were also recognized in photo competitions and published in several magazines, newspapers, books and Web pages.

#### What has been your favorite part of the Imagine Cup competition thus far?

So far, our favorite part has been the experience of working in a team, and sharing and developing different ideas and thoughts. While recognizing and constructively criticizing each other we found a common language, which in the end resulted in a realization of an idea we are both proud of.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

We came up with the idea after several brainstorming sessions, during which we found a solution both inspiring and inside the borders of our capabilities. The idea was influenced by the knowledge and experience we got from our university education, combined with our concern for ecological issues. Time, due to our college duties, was scarce, but sufficient. Technological issues were always kept in mind at the start of every idea, so we didn't have problems afterwards.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career as a professional photographer?

After the finals in France, we plan to continue our study so that we gain our college diplomas and eventually work as photographers/designers. We hope that the finals bring us new opportunities which will help us achieve our goals of working in a creative and satisfying environment.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to exploring Paris and the seeing cultural heritage of France, to meeting new people from countries we will probably never get the chance to visit and, most importantly, getting a once in a lifetime opportunity to experience a worldwide photo competition (like this one).

#### Links to more information

<http://cid-00d1a15a7b0e81b5.spaces.live.com/photos>  
<http://esens.carbonmade.com>  
<http://www.josipbota.com>







Croatia



## Voodoo Delirium

Team Members  
Duje Nebojša Pandžić  
Martin Štokić

### Photo Essay Title Voodoo Child

#### Photo Essay Storyline

We start from the idea that a human being is the most powerful technology of all. We are the ultimate "machine" and we can achieve anything we can imagine. But the problem is that we tend to get lost along the way. We start by looking at the problems we encounter on our path through life. Then we focus on how individuals can help to develop the change that we want to bring to the world around us. As we are "THE" technology, we show how we can spark the change in our surroundings, hoping it will spread like a wildfire. The idea is wrapped up by the last image of a pregnant woman, where the technology actually lies within. We can teach the child how to talk, walk, dress, but the most important task is to instill within the child the respect and love for the world that passively helped in bringing it to life. The older people can do only so much as their instinct allow, but the main focus lies on the child.

#### Technology/software used

- Olympus E3 and E500
- Olympus Zuiko Digital Lenses - 8mm f3,5 Fisheye
- Olympus Zuiko Digital Lenses - 14-54mm f2,8-3,5
- Olympus Zuiko Digital Lenses - 35-100mm f2
- Olympus flash units - FL36, FL36R, FL50
- Microsoft Windows Vista Ultimate
- Adobe Lightroom 1.4.1
- Adobe Photoshop CS3 10.0.1
- ACDsee Pro 2

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Photography invitational?

The crucial moment was when we saw the photos from the last year's Finals in Korea. We made a decision and started to prepare for this year's Imagine Cup. In the beginning we had created three different concepts, but the two were quickly discarded because we knew everybody would use the easily reached conclusions about clean energy, air pollution... etc, so we went for the viewers consciousness, after the things most people oversee in their daily struggle, what most people think of as "normal", what most people take for granted. So we built up the story in about a month. Then we rounded up some of our sponsors who backed us up while we were creating. And after 3 months and some \$\$ spent, we concluded the adventure, uploaded the PowerPoint and waited...

#### Background on your team: Who are you and how did you meet?

Some facts to be considered when you stumble upon us. Friends before teammates. One of us is a creative force. The other can transform that creative power into photographs. We both study at the Faculty of Organization and Informatics. One of us is from Split, the other from Rijeka, Croatia, respectively.

We met in year 2001, and ever since then it's been a rollercoaster. We had good times, and bad as well, but the point is that we have surpassed ourselves in that period many times, and stayed together. Actually, that is what a real team is supposed to do, isn't it?

#### Team Experience: What experience did you have with photography before competing in the Imagine Cup?

The camera is one of our extensions, the third eye that allows us to see beyond the power of our vision... it allows us to see into 1/23 of a moment, a brief look at the history of that fraction of the time, which went by us so fast. Our brain is rushing through all the information it has to cope with and process it, so usually it does not have time for the playful part of our inner self, and that is what we have from our photos.

#### What has been your favorite part of the Imagine Cup competition thus far?

Favorite part... hmm. There were no favorite parts when two strong individuals work together. Many times, a part is the clash of ideas, perception and knowledge about photography. So after the Scylla and Charybdis of that adventure, the sea went still, and we had no more "challenges" afterwards. We successfully reached Crete on the 23rd of May (the day the Finalist teams were announced), so it was all worth it, and that was the most favorite part.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

It may seem weird, but so far you should have got used to weird when we are considered... Listening to Pink Floyd was when it emerged, ugly and only a thought. So we raised it as one of us until we made it what it is. The challenge was how to show to others clearly what was already clear to us - You know it could be more than challenging. Other stuff just went one after the other... But we should better prepare next time.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career as a professional photographer?

After Paris we intend to finish school, it is high time for that. Our other plans can wait out a bit.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

As we are primarily students, we look forward to a better cuisine than what is available, for us, on a daily basis in a student mess hall. Then, the simple fact that the event is held in Paris should keep us anxious. And if even that does not cause our integer to overflow, we look forward in competing and at least taking part in this competition (among meeting other people, cultures, experiencing culture shocks, networking, creating viable connections for our future, etc.).

#### Links to more information

HRPhotoContest  
FotoZine  
Ptićica.com  
PhotoSIG  
DeviantART  
Team Voodoo Delirium Live Space  
Team Voodoo Delirium team page





Singapore



## Solar Lunatics

Team Members  
Chan Xiang Ju  
Gan Soon Bing

Mentor  
Leon Chua

### Photo Essay Title Electrical Technology-Renewable Resource for Sustainable Environment

#### Photo Essay Storyline

Much more can be done to reduce the impact of humans on the Earth's ecosystem. We can increase the use of technology that lowers reliance on traditional fossil fuels, as well as prohibitively expensive bio-fuels (which also causes food prices to go up unnecessarily). Our photo essay showcases how current appliances can be made more energy-efficient by incorporating New Technology.

#### Technology/software used

- Microsoft PowerPoint 2008
- Adobe Photoshop CS3
- Adobe Lightroom
- Aperture 2
- Nikon D80
- Fujifilm S3 Pro

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Photography invitational?

Photography is our passion. It's a medium for us to express our feelings and thoughts.

#### Background on your team: Who are you and how did you meet?

Both of us are from Singapore Polytechnic's School of Digital Media and Info-communications technology, studying under the Diploma in Information Technology course. We met at Singapore Polytechnic when we were in the same class.

#### Team Experience: What experience did you have with photography before competing in the Imagine Cup?

Soon Bing: I used to take pretty pictures of my surroundings with my point and shoot.

Xiang Ju: I seriously picked up photography under the influence of my uncle Mr. Lee Yew Sim. Since I was very young I have been playing with my father's camera. My father has also been an avid photographer. I currently freelance in Event photography projects.

#### What has been your favorite part of the Imagine Cup competition thus far?

Getting to the finals!

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

Every day millions of people are starving and many more lack access to basic technology such as the Personal Computer due to a lack to electricity. We thought of showing the world how much more we can do to save the world while at the same time enhancing the way of life of people. We took a long time to fully develop the idea into what it is today.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career as a professional photographer?

Going back to our studies. We're drowning in school projects; though we love IT, IT kills.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

Snow? We have never seen it in our life. ☺

Ok, just joking, we know it's summer and from what we have read it generally does not snow in Paris. We're looking forward to have the chance to experience a different culture from Singapore and beyond Asia which already has a rich mix of culture.

#### Links to more information

<http://www.sgsnap.com> - Xiang Ju's Blog

<http://www.tinyurl.com/58xkuh>





## United Kingdom



### Jason Parlour

Team Member  
Jason Parlour

Mentor  
Leon Chua

### Photo Essay Title What's Your Carbon Footprint?

#### Photo Essay Storyline

My focus was to try and highlight the positive impact that people at an individual level, as well as large corporations, could make by switching to greener sources of their energy supplies. I also highlight the sharing of these methods through technologies such as the Internet. I closed the storyline with a reminder of the negative impact if we don't change our actions.

#### Technology/software used

- Cannon EOS 40D Camera Body
- Cannon EF 24-105mm lens
- Adobe Photoshop CS3
- Windows Live Photo Gallery
- PaintShopPro 7
- PowerPoint 2007

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Photography invitational?

I'd had an interface design idea I was keen to bring to Microsoft for some time, and then while chatting with someone over lunch one day, they told me about the Imagine Cup competition and how this may be the ideal way of getting it in. Then after buying my first proper camera in December, someone else recommended I also enter the photography competition, which became my only focus for the competition.

#### Background on your team: Who are you and how did you meet?

It's just me! (Although a couple of friends did give me some very positive feedback to help encourage my final selection).

#### Team Experience: What experience did you have with photography before competing in the Imagine Cup?

December 2007 was the time I bought my first SLR, since my last compact zoom camera had broken over 9 years earlier and I had nothing to replace it!

My limited experience was therefore based entirely on seeing other people's images over previous years, and reading the instruction manual that came with the camera to try and learn how to capture the shots I had in mind.

#### What has been your favorite part of the Imagine Cup competition thus far?

Certainly one of the most memorable moments, was eventually finding a beach where the sea had just gone out enough to leave some clean, soft enough, sand, ready for my footprint, walking around barefoot, and then trying to capture, just the right footprint, from just the right angle, just as the sun was setting, whilst also trying to keep a manic dog from running through the shot and mucking up the sand!

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

I've been passionate about helping protect the environment for many years now, and had a few ideas on how I was planning to present my thoughts through pictures to try and encourage others to be mindful of their own impact, both at home and at work.

The final selection was whittled down from around 4,500 photos taken over the last few months for this project, as a result of my daily activities (some planned, mostly just whilst walking around), with the storyboard writing itself on making the final selections.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career as a professional photographer?

Since starting in photography a few months ago, I'm very grateful to have already had a small number of my photos published in the local and national media, and being blown up for studio walls. Photography is certainly something I love doing, and aim to continue doing for others, however I can, in the future. I've already made contact with a number of professional photographers with a view to gaining some experience with them. My new Web site [www.jasonparlour.com](http://www.jasonparlour.com) will be developed to help launch this new business soon.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

This will be my first trip to Paris, so I'm very much looking forward to getting the chance to experience the unique Parisian culture, and aiming to capture moments in photos as part of the competition task. In particular though, I'm keen to meet with the other competitors where I've been particularly impressed by their own storyboards, to try and gain inspiration from their work and techniques for my own future photos.

#### Links to more information

<http://jasonparlour.spaces.live.com> – my live spaces account to help showcase a range of photos from various shoots, quickly and easily, for those in the photos.

<http://www.jasonparlour.com> – my new photography website, to be developed very soon.

<http://www.therapy-agency.co.uk/about/environmentalpolicy.html> – a business I set up, to try and help reduce environmental impact in the UK. I decided to focus on the provision of professional massage into workplaces, trying to reach decision makers and developers. This was because by helping reduce stress, and therefore increase mindfulness, people tend to be more aware of their surroundings, and their impact on it, thus helping make changes for the better.





## United States



### Provisio

Team Members  
Jennifer Hui  
Melissa Hui

## Photo Essay Title Monitoring Systems for Tropical Rainforest Sustainability

### Photo Essay Storyline

Our photo essay portrays a global movement to not only sustain our natural resources, but also to slow the effects of global warming and deforestation as caused by the negative effects of agriculture, deforestation, ranching, and harvesting of natural resources by watching them carefully. From South and Central America to Australia, these lush ecosystems play a critical role in:

- Regulating climate;
- Future medicinal purposes (25% of the Western pharmaceutical are derived from rainforest ingredients; 1% of these trees have been tested by scientists; 3,000 plants are active against cancer cells with 70% of these in the rainforests);
- Oxygen production (20% of the world's oxygen production);
- Fresh water reserves (Amazon's Basin contains 20% of the world's fresh water);
- Preservation of unique species;
- Food production (80% of the world's diet), and much more.

However, nearly 214,000 acres per day are lost—larger than New York City. 50,000 species of animals are lost every year. At this rate, we will lose all species and rainforests by the year 2030. The technological focus is on sustaining tropical rainforests by the implementation of real-time monitoring systems that are both mobile and stationary. By use of solar powered roving bots that are capable of measuring data derived from the soil and plant life at the canopy level as well as photovoltaic fitted stationary computing devices to measure at the ground, a depicted laboratory is able to monitor and analyze, the current conditions and status of any given area of selected rainforest systems. By being aware of what is happening in our rainforests, we are better suited to protect them and sustain our world as a whole. We have to do this given the significant impact they have on our Earth.

### Technology/software used

- Cannon 40D Camera Body
- Canon Digital Rebel XTi 10.1MP Digital SLR Camera
- EF-S 18-55mm f/3.5-5.6 Lens
- Canon PowerShot Pro Series S3 IS 6MP
- Adobe Photoshop CS3
- PowerPoint 2007

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Photography invitational?

Emerging as competitors from the Microsoft Imagine Cup in 2007 and having placed in the Top 20 (semi-finalists) in the world for the Short Film Invitational was a great experience. Getting to work with our then teammates Michael Wong and Jake Mrozewski, we decided to compete again in this invitational to contribute our perspective on technological solutions for the environment to continue the intrepid spirit of innovation. Being both amateur photographers and students in the biological sciences field (with secondary concentrations

in physics or technology), we are familiar and comfortable with the artistic, scientific and technological sides to this competition.

### Background on your team: Who are you and how did you meet?

We are a sister team from the United States attending university in Michigan with respective majors in biological science and biomedical physics (pre-medical studies). Though photography had always been a creative outlet, we never considered taking our ideas and artistic perspectives to the world—until now. Having grown up together as children of American “Big Three” automotive engineers in the suburbs of Metro Detroit, we were encouraged to view the world in the context of engineering and technology merged with design and ergonomics. From there, we focus our creative ventures in bettering society and meeting humanity's needs.

### Team Experience: What experience did you have with photography before competing in the Imagine Cup?

Prior to the Imagine Cup, Jennifer began as a landscape photographer, her work documenting travels and nature. In high school, she produced a photo book on West Michigan's sand dunes and lakefront. Since then, she continues to develop her skills in various genres. Melissa took up digital imaging and Photoshop at age 10, before formally taking to portrait photography.

### What has been your favorite part of the Imagine Cup competition thus far?

We've really enjoyed the opportunity to represent our university at the US Finals in Los Angeles, California in the Top Three and having met a lot of really talented young people as well as distinguished professionals and industry experts.

### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

Our biggest challenge came in deciding on a topic that would be able to utilize components of today's technology, but not rely on it completely throughout the essay as to allow something new and innovative to emerge. We wanted to stand out as futurists, avoiding the common past and present while stepping into the future. By assessing the most crucial resource that our planet needs to preserve—tropical rainforests—we combined our academic backgrounds and creative skills to create an essay that gets to the root of an initiative to preserve our planet as well as our livelihood.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career as a professional photographer?

We hope to continue pursuing our interests in photojournalism and our individual genres in photography and to develop our skill set for future creative endeavors.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

The opportunity to photograph Paris and various parts of Europe that we've never visited before as well as meeting students from other countries and cultures is going to be a wonderful experience for us.

### Links to more information

Live Space Link: <http://cid-198db1f9aa3dd274.spaces.live.com>

J&M Hui Photography Blog: <http://jmhuiphotography.wordpress.com>





## Short Film

The Short Film Invitational highlights the art and science of telling a story. Students are challenged to share a perspective on the theme of the Imagine Cup. Moreover they are asked to express their unique perspective in a unique medium that still challenges even veteran filmmakers.

Al Gore's "An Inconvenient Truth" demonstrated that film is a powerful medium that has the capacity to change the world for the better. Like all works of art, great films can educate, entertain, and ultimately, move audiences to a new perspective that inspires real actions in the world.

From concept and storyboard, to footage and editing, the Short Film competitors must be able to put it all together. Unique perspectives and creativity abound in this process but the story must still come through the digital media and have a strong purpose and meaning. Only the most talented young filmmakers will even attempt such a feat. Our six finalist teams have already demonstrated extraordinary talent for storytelling, as well as technical expertise.



Canada



## Robotree

Team Members  
Drake Birmann  
Ryan Morrison  
Media Ridha  
Dan Tran

**Film Title** Terra

### Film Storyline

*Terra* is a fairytale about an earth-child who dwells in the forest, and has the ability to sense the environmental impact of human actions on the natural world. Upon discovering garbage from the city in her peaceful forest, Terra decides to help humanity make informed decisions to improve the everyday uptake of the earth's energy and resources by inventing a device to determine humans' ecological impact. Terra brings the very first ecological calculator, the "Eco-Cal," to the city. The Eco-Cal can calculate the ecological footprint of every human being and interpret it through a display screen that shows the unseen destruction of our actions.

At first, people rebuke Terra and are unwilling to listen to what she has to offer them. Then a young boy who believes in Terra's message elps her and takes her to a willing family. The story ends by placing the fate of the natural world not simply on the imaginative technology of the Eco-cal, but on the choices of each individual to sustain the environment in the hopes of a greener future.

### Technology/software used

- Cannon 40D Camera Body
- Panasonic DVX 100B
- Final Cut Pro 6
- Adobe Creative Suite Design Premium
- Protools LE 7.3

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Short Film invitational?

The opportunity to participate in an international competition across a diverse community of regions, cultures, and individuals commonly interested in filmmaking was our main inspiration. The sustainability of the environment is something our team personally cares a lot about; as it is the theme of this year's competition, it became the motivation for our team to meet the challenge and create a short film that addresses an integral issue in modern day society. As film and graphic arts students we were interested in collaborating with each other and using our skills to produce a short film that was enjoyable to watch, and effective in relaying the message that the earth's fate lies in our hands.

### Background on your team: Who are you and how did you meet?

Team Robotree is made up of four friends, Media Ridha, Drake Birmann, Ryan Morrison, and Dan Tran. We're attending university in southwestern Ontario. We were drawn together by our common love of film, graphic design, and storytelling, and the Imagine Cup competition presented a perfect opportunity to work together on a creative and challenging project. From Day One we were not only excited to work on the project, but keenly aware that we had an extraordinary team dynamic. In addition to this being a tremendous learning experience for all of us, we also are grateful we shared it as friends.

### Team Experience: What experience did you have with short film before competing in the Imagine Cup?

Our team creates video projects independently and collectively, and we have participated in film competitions as well. Ryan Morrison entered his films into the University of Western Ontario (UWO) Film Festival in 2006 and 2007. Drake Birmann won first place at the same festival this year for his film "A Bloody Suitcase". In 2007 and 2008, Media Ridha helped produce a few shorts for the UWO Film Festival, and Dan Tran's talent in animation got him involved in short film earlier this year.

Our experiences extend from a personal interest in film, and the encouraging community of peers we work with.

### What has been your favorite part of the Imagine Cup competition thus far?

The materialization of Terra has been Robotree's favorite part of the Imagine Cup competition so far. With the help and support of our friends, family, local businesses, and members of our community, we have created an effective short film from a simple story. By working with a wide range of individuals during the production of Terra, we have met new people with whom we have shared valuable experiences. We appreciate how it has taken the support of our community and hard work to achieve our goal, which is a fitting realization in context with the message of our film.

### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

Once a week Team Robotree got together to talk and brainstorm ideas that we could develop into more cohesive storylines for a fiction film. We fell in love with the idea of a young girl that could feel the human impact on the environment, and her little invention. Once we got the main idea, we began to develop the concept and our process of production. Our personal challenges were to maintain a uniform story and aesthetic while incorporating each member's ideas though with discussion and compromise we surpassed those obstacles and created a collective vision we were proud of.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career in the film industry?

Reaching the Finals in the Imagine Cup competition has been a great achievement for our team. It has allowed us to realize that we live in a world where anything is possible! After the Finals in France, Team Robotree will travel together and then split off into our own personal journeys. Some of us will return home to Canada to finish our studies, some will continue to travel, and some will pursue careers in the arts industry. Entering the Finals has provided us with an excellent opportunity to explore Europe, and the experience to enter into respective fields of graphic design and film.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

Meeting other creative peers from around the world is an exciting aspect of going to the Finals in France. It will be so enriching when we get to speak and engage with the other teams that have been working towards the same goal for the last year. Together, we will be able to meet new people, understand new cultures, converse, explore, and experience this once in a life-time opportunity that we all worked equally as hard to get to, which will enlighten and electrify everyone participating.

### Links to more information

One of the members of Team Robotree, Dan Tran, is the talented lead guitarist in a Rock-Reggae group called Staylefish. They are working on their third album, and have allowed us to use their song "Not Too Late" in the final credit sequence. The band will be touring across Canada and some U.S. locations for the remainder of the summer.

For more information visit: [www.myspace.com/staylefish](http://www.myspace.com/staylefish)

**Watch the Film on Channel 8!** <http://channel8.msdn.com/Posts/Imagine-Cup-2008-Round-3-Film-Terra/>





Korea

## NEIP

### Team Members

Il Jin Joung  
Seong Ran An  
Yeun Jun Choo  
Sung Wook Lee

### Mentor

Prof. Hae Jung Suk



## Film Title The Red Cloak

### Film Storyline

The Red Cloak is a story about a boy who waits for Superman to come save the environment, but eventually comes to see that the environment can be preserved with the help of technology.

The central character in our film is a boy who is suffering from air pollution. The boy believes that someone with super powers will come and save the environment like happens in the movies. That's because he thought that the pollution problem was so serious that only the Superman could save the city. He waited for Superman with great hope but he sees a machine instead of a macho guy in his imagination. He is confused at first by this vision, but as the machine clears the air, he admits that this machine is the Superman he waited for.

"Imagine a world where technology enables a sustainable environment." When our team faced this topic we got together and discussed current environment problems and solutions.

To solve these serious environment problems, we thought we would need a hero with super-strength. Development of the technology brought us a better life but also the pollution. However, like the Superman the boy met, we found a chance to save our environment in the development of new technology.

### Technology/software used

#### Post production

- Cannon EOS40D Camera Body
- Camcorder: Panasonic Camera : DVX-100B
- Lighting System: 650W Tungsten Spotlight, Arri 1kW
- Sound Recording: Shure FP 24 (portable mixer)

#### Post production

- Video Editing: Adobe Premiere Pro CS3
- Sound Editing: Pro Tools 7.0
- 2D Image Editing: Adobe Photoshop CS3
- 2D Compositing: Apple Shake 2.51
- 3D modeling/shading/lighting/dynamic/animating: Autodesk Maya 2008

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Short Film invitational?

A few years ago, the Captain of our team, Jung il-jin saw an interview about a team who participated in the Imagine Cup in a software magazine. Although the team didn't win, il-jin was fascinated by their passion for the challenge.

After that il-jin found out about the Short Film category and we saw there was more to the Imagine Cup than programming. Because we were majoring in Digital Pictures, we wanted to meet the challenge for this field.

In addition, we were given a chance to see the award ceremony of the last year's Imagine Cup Worldwide Finals which was held in Seoul. There, we saw the brilliant minds around the world cheering about their winnings and at that moment, we started to look forward to the 2008 Imagine Cup.

In August 2007, Jung il-jin organized two Production majors and two 3D Animation majors to form Team NEIP to challenge for the 2008 Imagine Cup.

### Background on your team: Who are you and how did you meet?

Everyone in our team is a senior from Ajou University. We are all dedicated to winning the 2008 Imagine Cup. As we studied under the same branch in all the different interests of fields like production and 3D Animation, we decided to work together to create something fun and exciting.

### Team Experience: What experience did you have with short film before competing in the Imagine Cup?

Jung il-jin and An Seong-ran, both production majors, had experience in producing, writing scenarios, and making short films. Choo yeon-jun and Lee sung-wook had experience in 3D Animation Films. These experiences helped us with producing "The Red Cloak". Making films takes a lot of different skills.

### What has been your favorite part of the Imagine Cup competition thus far?

It was really hard work to make a good film about the 2008 theme in the first round. But we had a great time finding interesting material for our story. We also had fun filming with friends during the second round. Our film crew and also our family and friends have been supporting and motivating us since the start of the competition. Thanks to all of them.

### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

We started by asking, "What do we need to save this polluted environment? Is it a hero's super power we need, or God to step in and rescue us?" Then we realized, instead of waiting for outside help, what can we do now is to complement our environment-saving technology.

With this in mind, we produced "The Red Cloak" and had a lot of fun along the way. But, just three days before the dead line, we were faced the with a copyright problem, so we couldn't use our scene with the Superman figure and the scene we picked up from the Movie, Superman Returns. We had a lot of confusion because we needed to edit the whole film.

There is a Korean saying, "A misfortune turns into a blessing." Just like that old saying, as we re-edited the whole thing, we found the result was a more comprehensive and simple piece.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career in the film industry?

We wish to show our film to many people. We hope that our theme, of how technology enables a sustainable environment, will motivate them to make a better world. All of us will graduate next year. So we are going to make films. After we graduate, we will find jobs in the visual arts.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

Meeting other creative peers from around the world is an exciting aspect of going to the Finals in Most of all, we are looking forward to meet the brilliant minds of the world and creating many interesting memories with them for a week.

That is something the money just can't buy and is the most benefit from the Imagine Cup. Also, we are little bit worried about the processes we will go through for the 36 hours of the Final competition.

We only hope we can show all of our abilities and possibilities, despite the topic.

### Links to more information

<http://neip.blogspot.com/>

**Watch the Film on Channel 8!** <http://channel8.msdn.com/Posts/Imagine-Cup-Round-2-Film-Redcloak/>



Mexico



## Lava Lamp

Team Members  
Grace Montoya  
Aldo Murillo

### Film Title My Organic Robot

#### Film Storyline

Meet the Wobot: an environmentally friendly robot.

Our film is about a new kind of robot that made of pieces of technology, wires and plants! The Wobot, or Green Robot, was born just in time to save the planet from an unhappy ending.

It all started when technology wasn't environmentally friendly, causing the planet to become a trashy place to live. Luckily a girl realized one day that humanity had a huge problem and that something needed to be done about it. She started building a perfect robot that could help solve the pollution problems. The Wobot was born. It helped not only to make Planet Earth a greener, cleaner and better place – It was also a friend and a teacher to all of those who needed help saving their towns, cities, and of course the planet.

#### Technology/software used

- Adobe Flash CS3
- Adobe After Effects CS3
- Adobe Premiere CS3
- Adobe Photoshop CS3
- Adobe Illustrator CS3
- Audacity 1.3.3
- Microsoft Word and PowerPoint 2003
- Mac Book
- Toshiba Satellite Notebook A75 S226
- Canon Rebel XTi Digital Camera

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Short Film invitational?

The most important thing was that every year the Imagine Cup has a new theme, and every year it is a challenge for us to think about that theme. This year's Imagine Cup was no exception, but because we are in love with short film contests we decided to try to win in this category.

#### Background on your team: Who are you and how did you meet?

We are two students studying for bachelor degrees in Computer Science with interests in film, animation, art, and design. We met in 2005 in school because we had the same interests and since that time we have participated in many student and non-student contests related to our interests. Even though some people might think our Bachelor's is not really related with the creative field we have already won some awards already such as semifinalist distinctions at the Adobe Design Achievement Awards 2007 and 2008, and also awards from the Reel Ideas Studio Cannes Program 2007 and 2008 to name a few.

#### Team Experience: What experience did you have with short film before competing in the Imagine Cup?

We just got back from the Cannes Film Festival 2008 where we received awards from the Reel Ideas Studio. Our documentaries were screened in the Palais at the Jean Louis Bory Theatre and judged by Rob Epstein, the Oscar winning documentarian together with Christopher Coppola of EARSXXI and PAH-Nation, Sheila Sofia of University of Southern California, and Mike Kanfer, Adobe Business Development Manager. Aldo's Documentary won Jury Prize Winner the top award from the program, and also The People's Choice Award he participated as the Motion Graphics designer. Grace's documentary won Distinguished Documentary Award, she participated as the cinematographer. At Cannes we also were participating in the Short Film Corner with a couple of short films, one of them titled "Traffic Jam" which was also honored as Distinguished Community Documentary at the Reel Ideas last year.

#### What has been your favorite part of the Imagine Cup competition thus far?

The challenge the theme gives to you. We both like the idea of thinking about something related to a new theme every year.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

We came up with the idea because nowadays organic products are gaining popularity all around the world. Then the idea just came... What if there was an organic machine? We just loved the idea of combining organic thoughts with technology. The biggest technological challenges were working in our laptops. So for me (Grace) the RAM and hard drive memory has always been a problem as my computer is a bit old. And as for personal challenges we were really busy with school at the beginning of the competition, then getting ourselves ready for Cannes. And our jobs were time consuming, so we had to work on a really tight schedule to finish our film on time. Other challenges were economical because we had to provide ourselves with everything we needed for our short film.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career in the film industry?

We are right now working as freelancers but we would love to get a scholarship study our master's in film/animation/design. We would also like to get a steady job in the film related industry. Also right now we are planning to turn "Traffic Jam" into an independent documentary film. "Traffic Jam" is about the traffic vehicle in Mexico City, it is 100% environmental related to this year's Imagine Cup. In Mexico City some people are spending as much as 7 hours every day in traffic jams, there are just too many vehicles and pollution. So we would like to try to make people aware of the environmental impact this huge problem has. And take this documentary to Cannes on the upcoming year.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to experiencing the satisfaction of doing a great job representing our country and to meeting the other teams and getting along with each other so that it all feels like home, without the pressure of being in a different place without knowing anyone. We are also looking forward to meeting all the talented people who make the Imagine Cup possible and networking with them.

#### Links to more information

<http://www.grosellastudios.com>

<http://www.gracemontoya.com>

<http://www.1306am.com>

**Watch the Film on Channel 8!** <http://channel8.msdn.com/Posts/Imagine-Cup-Round-2-Film-My-Organic-Robot-from-team-Lava-Lamp/>







## Sri Lanka



### Gènès|pictures

Team Members  
 Buddhika Perera  
 Salinga Kodikara  
 Gimantha Aponso  
 Malika Fernando

Mentor  
 A. Janaka Suranga

**Film Title** Friends

#### Film Storyline

Our film is about a man who is very dirty and doesn't care about anything at all. He has a cute dog named Rex who has been his best friend for a very long time. The man is very poor and he's making paper bags out of old dirty paper to make a living but he never gets enough money. Rex is very intelligent and he doesn't agree with his master about neglecting the environment.

One day Rex behaves very violently when the man tries to throw his garbage into the garbage yard. Two good friends are parted. Then the man decides to learn about "Recycling Technology". After three months he has become a completely different person. He knows how to earn money from recycling, he's using clean recycled papers to make paper bags, and he's earning money by recycling and has even opened a small paper bag business. The man now understands the value of the environment and he thanks the environment as his new friend who deserves his care like his good old friend "Rex" (The Dog).

*"Good Friends can always change the world."*

#### Technology/software used

##### Camera

- Panasonic DVC-62
- Video Format:
- DV (High Definition)

##### Software

- Adobe Premier Pro CS3
- Adobe After Effects CS3
- Composite Lab Pro V2.1
- Autodesk Combustion 2008
- Adobe Photoshop CS3 Extended V10.0
- Nuendo 3
- Reason 4
- Adobe Media Encoder (Built in with Premier Pro)

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Short Film invitational?

In 2005 our teammate Buddhika found this competition when he was searching the Internet but unfortunately at that time the competition deadline had passed. Also a lecture conducted by an official from Microsoft Sri Lanka at the SLIIT (Sri Lanka institute of Information Technology) prompted Buddhika and Malika of our team to get into film making. Even though Sri Lanka is a small developing country, we are famous for our artistic films. Many of our films have been selected to compete at international film competitions including Cannes. The Short Film category was the most compelling choice. We've always dreamed of making a film since we were children. Short Film was the only area where all our team could participate and contribute collectively.

#### Background on your team: Who are you and how did you meet?

We have been friends since childhood. Buddhika and Malika were students together at Sri Lanka Institute of Information Technology (SLIIT) while Salinga and Gimantha are students of National Institute of Technical Education Sri Lanka (NITE-SL) and Technical Engineering College (TEC) Sri Lanka respectively.

#### Team Experience: What experience did you have with short film before competing in the Imagine Cup?

The team Gènès|pictures competed for the Imagine Cup 2006 short film invitational with only three members and became one of the top 30 teams in the world. Unfortunately we couldn't make it to the finals last year. Some of our team members have changed. Dilanka who did a great job last year with us is not in our team this year but Salinga and Malika came in to keep make our team stronger.

Team leader Buddhika had some experience in making visuals for a few songs which became popular among local TV fans. Gimantha was involved composing music for some of these. The other two members were side supporting in this exercise in numerous ways. This collective attempt in producing visuals for songs as a hobby, led to the idea of involving in this competition.

#### What has been your favorite part of the Imagine Cup competition thus far?

Filming is our most favorite part in this competition because we had lot of fun and faced a lot of challenges during that period. According to the script we had to find a dog who could liaise with the teammates, to make it a success. This proved to be a real challenge. Ultimately we were lucky enough to find Rex (the dog) who gave a brilliant performance without any complaints, and at the same time with a lot of understanding. If not for the fine qualities of the dog our whole exercise could have been futile.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

In our home town we are having major issues with eliminating garbage. There is a huge garbage mountain in the middle of the city. We thought we could make a story out of it. On the other hand, there's been greater awareness among the general public of the importance of recycling garbage, at the initiative of the present government in Sri Lanka. According to the script more than 90 percent of the filming had to be done outdoors, but spending hours among stinking heaps of garbage was not that easy. Even the dog, Rex totally disliked the idea at first, but finally was compelled to do the job after much persuasion and encouragement.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career in the film industry?

We'll continue to make short films and hopefully make a feature film one day under the name of Gènès|pictures. We are always ready to help make our country or the world a better place with our ideas.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We think that we have already surpassed the most difficult part. We have become finalists with meager resources. It already is an achievement. The challenge in Paris will be taken on more leveled ground. We as a team are quite confident of our strengths, and therefore we eagerly look forward to the finals in France, inspired by celebrated Sri Lankan film makers like Sir Lester James Peiris.

#### Links to more information

[www.genespictures.com](http://www.genespictures.com)

**Watch the Film on Channel 8!** <http://channel8.msdn.com/Posts/Imagine-Cup-Round-2-Film-Friends-from-Gnespictures-Sri-Lanka/>





## Taiwan



### Team Circle

#### Team Members

Hao-Jan Chang  
Shu-Wei Chang  
Yen-Chi Tzeng  
Di-Er Lin

#### Mentor

Professor Norman Ro

### Film Title Planet La Roue

#### Film Storyline

Planet "La roue" is where rabbits live. They grow carrots and live on the juice they produce. One day the quantity of juice went low, so the rabbit turn the machine to full load. Not before long, they discovered that instead of using more greedy technology, they should consider more old-fashioned but nature-friendly technology to develop a win-win policy to the planet they live.

"La roue" means "circle/round" in French. To sustain a good environment, one must know the idea of balance in using technology and their good will. The more you take from the environment, the same amount of feedback you will have to pay; even when you have very good technology, you can only speed up the cycle of give and take, but it's not a short cut to take more than you should have. Good technology allows us to develop and to apply more resources, but what's even better, is the technology to maintain a delicate balance between residents and environment.

#### Technology/software used

We used the simplest technology, which is a pencil and a notebook to do the sketch and drew the storyboard.

- Adobe Photoshop CS2
- Adobe AfterEffect 6.0
- Autodesk® 3ds Max®
- Adobe Flash
- Microsoft Windows Vista home.
- Microsoft Windows XP
- Sony Vegas 7.0

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Short Film invitational?

Our concept is "Technology is important, but what's more important is one's good will, which controls the way technology leads us."

So we choose the Short Film invitational because that's the fastest way we think, to share with people what we really believe.

#### Background on your team: Who are you and how did you meet?

Hao-Jan and Yen-Chi are high school classmates, Shu-Wei went to school with Hao-Jan, and Di-Er went to school with Yen-Chi. Four of us came from different backgrounds, but all had something to do with art. Hao-Jan studied cinema, Shu-wei studied visual communication, and the other two team members studied art.

#### Team Experience: What experience did you have with short film before competing in the Imagine Cup?

We have competed in the Imagine Cup before. We made it to the finals in India in 2006 and in Korea in 2007. We do short films and CFs under "Sunshine Universe Studio" founded by Hao-Jan in 2008.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our best experience so far is having a chance to challenge not only the best teams from all over the world, but also to challenge ourselves.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

The story came from one of Hao-Jan's project of a short animation. We've converted the concept of the story to fit this year's theme. The most hard part developing the project is to combine three different point of views from Hao-Jan, Shu-Wei and Yen-Chi, but we can always achieve some kind of harmonious results.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career in the film industry?

Go back to Taiwan, prepare for Imagine Cup 2009! We'll present our works on Channel 8, and our blog. By doing that we'll have more chances to do Commercial projects, hopefully.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We're looking forward to meeting all our old friends and making new friends from all over the world!

#### Links to more information

##### Team's Blog

<http://teamcircuitw.blogspot.com>

##### Team leader Hao-Jan's photostream

<http://www.flickr.com/photos/haoz>

**Watch the Film on Channel 8!** <http://channel8.msdn.com/Posts/Imagine-Cup-Round-2-Film-Planet-La-Roue/>





Turkey

## Team Ottomans



Team Members  
Cerem Dinç  
Mehmet Dogan Yetik  
Sercan Göktepeli  
Sinan Dinç

Mentor  
Filiz Şahin

**Film Title** Neoskan

### Film Storyline

Neoskan is the story of a perfect future world we imagined together with robots. A future world where environment sustainability would be ensured by helpful and hardworking robots.

In our movie, the improvements in technology enable us to protect our natural and environmental resources as well as to construct better and more secure homes for an incredible number of people who are still living in shanty-like houses nowadays. Can we imagine that we are close to this great technology?

However, Man finds it hard to accept this latest technology and even more to live together with it: Try to imagine for one second you see an immense robot walking on the street!

At the end Neoskan, one of the robots, finds through a young bird the most important thing which makes this life a better place to live: love!

### Technology/software used

- Windows Moviemaker
- Adobe Premiere CS3
- Adobe After Effects CS3
- Adobe Photoshop CS3
- Adobe Flash CS3
- 3d Studio Max

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Short Film invitational?

The idea of challenging thousands of students from different countries and different cultures all around the world inspired us. Making movies is the best way for us to express ourselves to the world so the Short Film invitational was the best fit for our team.

### Background on your team: Who are you and how did you meet?

We are all from different universities and different fields of study and none of us has a cinematic education but we are all addicted to cinema. This addiction brought us together to make movies.

### Team Experience: What experience did you have with short film before competing in the Imagine Cup?

This is the third (and fourth for some of us) time we make it to the finals in the Imagine Cup Competition. One of our team members has made a music clip for a famous Turkish pop singer and has design awards.

### What has been your favorite part of the Imagine Cup competition thus far?

The competition has been rough and challenging, but very exciting. It was a once in a lifetime experience that we will never forget. But, waiting for the worldwide finalist announcement was the most exciting and unforgettable part.

### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

We came up with the idea while one of our team members was zapping. We wondered how would it be to watch TV in the future and we decided to make a movie which gives the audience the same feeling of zapping in future days, stressing the development of technology .

Our director works 8 hours a day and goes to school at nights. To finish editing, compositing and other stuffs, he had to work in the office after school for many nights and had to sleep in a chair during this time. We shot the whole film with an avchd handycam and editing avchd video format was pretty hard. We made all shootings in Istanbul and three of the team members had to come from very far cities (the closer one goes to University in a city 250 miles away from Istanbul). The challenge was also the fact that all of us had to adapt to everyone's different schedule. Most of us are working and studying at the same time, so it was difficult to find a schedule convenient for all the team.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a career in the film industry?

The Imagine Cup gives us a chance to prove ourselves in the film sector and we want to use the advantage of this success with our past experiences to make more movies.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

Meeting with new friends from all around the world and discovering a new city, browsing around Paris to learn more about France, enjoying.... And of course winning!

### Links to more information

<http://www.sinandinc.com>  
<http://www.neoskan.com>





## Interface Design

Creativity, innovative ideas, and usability – when these three elements come together for users of software or Web applications it becomes pure magic.

Interface design is the design of computers, appliances, machines, mobile communication devices, software applications, and Web sites that make the user's interaction as simple and efficient as possible. The experience that the artist and developer can create with a well designed user interface can make or break an application. The Interface Design invitational challenges designers all over the world to create useful and compelling user interfaces that are forward thinking, unique and easy to use.

Participants have the opportunity to dream of an application, connect to the theme of the Imagine Cup, and show the world how their skills can bring the theme to life. The goal is to be innovative in envisioning revolutionary interfaces. Competitors are encouraged to get away from traditional user interface approaches and rethink the way we behave when in front of a computer screen.



*Interface Design*



## Canada



### GreeNet

#### Team Members

Jin Fan

Kevin Muise

#### Mentor

Ron Wakkary

### Project Title GreeNet Facebook Application

#### Project Overview

Global warming is quickly becoming one of the most important issues facing humankind, and has brought about concerns regarding sustainable practices, especially within western societies. In order to address this issue, we have designed a Facebook application with the purpose of creating a culture of conservation by providing its users with information on their energy usage. Employing an application through Facebook provides a platform to communicate to thousands of individuals and communities within our target audience who reside in various geographic locations. Social networks, such as Facebook, have become more than a mere source of entertainment – they are a means to communicate new ideas, become an active voice in a community, and more importantly, they are an opportunity to influence culture.

Our approach to designing the application was guided by a user-focused process, which has led us to create an enjoyable and informative user experience. Our system provides its users with an interface that acts as a virtual garden, where their participation in energy-conscious activities effects the growth of plants within that space. Users are also provided with information on their energy consumption, along with the consumption of their friends and communities, which can be generated through data from electricity providers. Visualizing this information is used to raise awareness of unsustainable practices through providing individuals feedback on energy consumption within their communities. In doing so, our system acts as a means to change energy consumption behavior towards more sustainable practices, not only in individuals, but within society at large.

#### Technology/software used

- Expression Design
- Expression Blend 2.5
- Visual Studio C#
- Adobe Photoshop CS3
- Adobe Illustrator CS3
- Sliverlight Streaming

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interface Design invitational?

This year's theme "Imagine a world where technology enables a sustainable environment" has really inspired us to contribute ideas on building a sustainable and livable environment. Being passionate about interaction design and interface design, we have decided to use the popular social networking tool Facebook to raise people's awareness on energy consumption and green technologies and thus foster a conservation culture worldwide.

#### Background on your team: Who are you and how did you meet?

Jin is an international student at Simon Fraser University who is originally from China and has been studying in Canada for 3 years now. On a small campus, it's hard not to run into the same people. Kevin was asked to work on the GreeNet project and after meeting and discussing the project, we both gelled.

#### Team Experience: What experience did you have with interface design before competing in the Imagine Cup?

We are studying interaction design at Simon Fraser University's School of Interactive Arts and Technology. Kevin's background in multimedia and graphic design, along with Jin's skill in visual graphics helped to create both a conceptually strong design that is both aesthetically pleasing and simple to use.

#### What has been your favorite part of the Imagine Cup competition thus far?

Late night design sessions and the many jokes told while plugging away at Expression Blend. Oh yeah, Paris (or at least the idea of it)!

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

Definitely having to learn new software to develop our application was a challenge. We worked well as a team, and we were able to communicate our goals effectively with one another. It was this ability to communicate that really helped us work through the challenges of not knowing how to implement a specific aspect of our project.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

Kevin hopes to wrap up his studies next year, and he will be pursuing a career in the area of experience design or interface design, especially within the area of sustainability.

Jin is going to complete her bachelor's degree on interaction design in the next year or two and hoping to get more working experience in user experience field before her graduation.

Kevin and Jin both hope the GreeNet application can collaborate with electricity providers worldwide and be implemented on Facebook in real life.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are looking forward to meeting people from various places in the world, being inspired by the many ideas that will be presented, and having the opportunity to share our own knowledge and experience with others.





China



## Frontfree Studio UI

Team Members  
Qijia Liu  
Zhiyong Wang

Mentor  
Xiao Deng

### Project Title IEMS (Integrated Environmental Monitoring System)

#### Project Overview

Our project is a next-generation 3D application of an integrated environmental monitoring system. It provides a clear and simple way to present environmental monitoring data, predict the results of that data on of the greenhouse effect, and in so doing help people create a sustainable environment.

The highlights of our project are the way we present the relationships among complex monitoring data. Our new design combines a diagram and 3D technique to present data, and users can easily access data monitoring information from their time zone and region.

#### Technology/software used

- .NET Framework 3.5
- Visual Studio 2008 Team Suite
- Microsoft Expression Blend 2.5 March 2008 Preview
- Microsoft Windows SDK v6.0A
- 3Ds Max

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interface Design invitational?

The Imagine Cup is the most influential competition in the area of computer science. So it's a good chance for us to put our knowledge into practice and gain some valuable experience. Each year since 2004, our school has actively participated in the Imagine Cup. So this year we wanted to be the representatives of our school, and come to the Imagine Cup to share our idea.

The reason why we choose the Interface Design invitational is that our team has always been pursuing relevant studies.

#### Background on your team: Who are you and how did you meet?

We are junior students from Beijing University of Technology, China. All of us are passionate about computer science. Because of this love for computer science, we joined the community (Frontfree studio), learned together, and worked together. We possess one dream of improving our ability. It's technology that provided us with the opportunity of meeting each other.

#### Team Experience: What experience did you have with interface design before competing in the Imagine Cup?

Before competing in the Imagine Cup, we had only taken part in some simple interface design development activities. We had no experience of systematically developing a interface design project.

#### What has been your favorite part of the Imagine Cup competition thus far?

By participating in the Imagine Cup competition, we have become more thoughtful when facing problems. This competition is also a good chance for us to self-reflect and correct our mistakes once. It enables us to get a better understanding of the knowledge we have learned. This is our favorite part of the competition.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

Each year many disasters happen. Our Integrated Environmental Monitoring System can help people make advance preparations for these disasters and lessen the damage. Our idea is to make the monitoring system work more efficiently and help the users to deal with problems more effectively. The personal challenge we faced was how to cooperate and accomplish the project on time. In comparison with the personal problems, the technological ones are easier to handle.

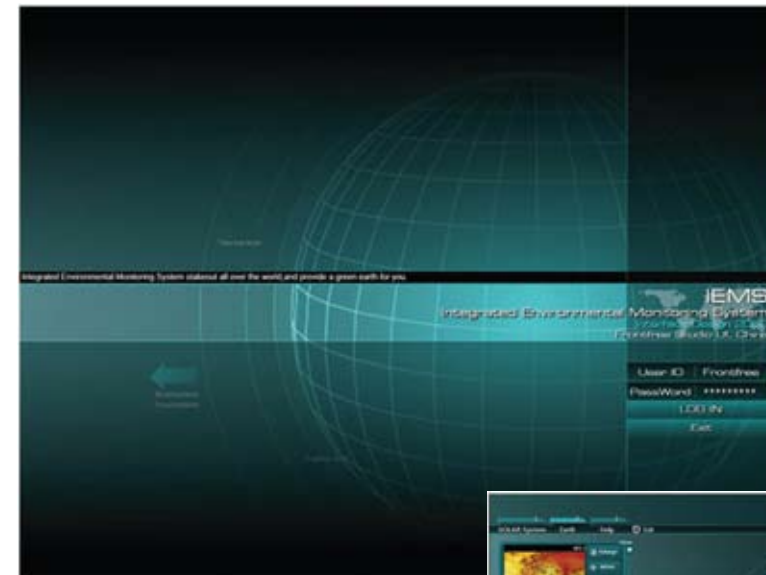
#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We will return to school and continue our studies after the Imagine Cup finals. In the mean time, we will improve our project.

We will use our project to launch a new business, if we have a good opportunity to cooperate with the local environmental department. We believe that our project could make monitoring systems more efficient and convenient.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We're most looking forward to competing with friends from other countries, sharing our ideas and experience and creating a wonderful memory with friends from many different culture backgrounds.





## France



### Edelweiss

Team Members  
Johanna Rowe  
Muhr Steven

### Project Title Waste Busters

#### Project Overview

Waste Busters is a touch-sensitive interface which is also essentially a sort of play-pal for children aged 3 to 5.

Thanks to the various activities available, young children can learn the correct everyday environmental behaviors and rapidly become aware of the role each of us can play in protecting the environment, in an amusing and agreeable way.

Although primarily designed for children, Waste Busters has a parental component: it is above all, an educational and interactive toy which provides the whole family with a fun way to share the basic values of protection of the environment.

#### Technology/software used

- Windows Presentation Foundation (WPF )
- C#
- XAML
- Microsoft Expression : Blend & Design

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interface Design invitation?

We joined the competition because we wanted to challenge ourselves.

#### Background on your team: Who are you and how did you meet?

Edelweiss is composed by Johanna Rowe and Steven Muhr. We met during a partnership between our two schools. Johanna comes from designers' schools (Strate College Designers) and Steven is a student in an engineering school (EFREI) in Paris.

#### Team Experience: What experience did you have with interface design before competing in the Imagine Cup?

Neither of us had any experience designing user interfaces before we competed in the Imagine Cup.

#### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the Imagine Cup was the creation and the development of our concept. And of course, the best part was to be qualified for the final.

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

We were inspired by our childhoods and we wanted to create an object for children. Our personal challenges during the developing were to learn everything quickly: WPF and designing with Expression Design.

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

After the Imagine Cup we plan above all to finish our studies, find a great internship and maybe launch our project or develop something new using Microsoft technologies.

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

We're really looking forward to meeting people from different countries, creating a great interface in the 24-hour competition, and of course, HAVING FUN!

#### Links to more information

<http://ic2008.efrei-microsoft.fr/>





## France



### JivAd

Team Members  
Jivane Rajabaly  
Adrien Ossorguine

Mentor  
Benjamin Talmard

### Project Title

e-Cube

#### Project Overview

The e-Cube has decorative purposes. This interface is supposed to be integrated into an LCD screen which you can hang on a wall anywhere in your home. The screen represents a beautiful natural landscape which will transform little by little. So, the e-Cube becomes a new window in an apartment and adds an attractive view! And here is the point: the owner of the e-Cube will have an impact on the landscape that he or she sees on it, because it will change depending on his or her ecological – or not – behavior in everyday life.

Thus, the e-Cube has **educational** purposes and helps the owner to become aware of his or her impact on the environment.

And finally a bit of **challenge!** First of all, it pushes its owner to consume less in order to get a more beautiful landscape on his LCD screen. But then, it can inspire and motivate users to engage in a more ecological lifestyle and try to contribute to it on other scales: by sensitizing the neighborhood, family members, etc. The impacts of behavior will be seen on both landscapes, and also, on charts on a dashboard.

#### Technology/software used

- WPF: C# & XAML
- Microsoft Expression: Blend & Design
- After Effect & Particle illusion

#### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interface Design invitational?

This is the only competition on such a large scale for students in the IT field. Moreover, it let us learn and develop our knowledge on Microsoft technologies. Interface Design is a category which obliges us to take in account on the same time development and design. So, it is an opportunity for us, developers, to develop our creativity and design skills.

#### Background on your team: Who are you and how did you meet?

We are two students from the same school, the EFREI, Villejuif (in the suburb of Paris), France. We are of different ethnic origins: Russian (Adrien) and Indian (Jivane). This is far from being a weakness, because our cultural differences helped us to be more creative and innovative and let us adopt different points of views.

#### Team Experience: What experience did you have with interface design before competing in the Imagine Cup?

We developed Web sites for Subject Matter Experts and worked together on several projects for our school.

#### What has been your favorite part of the Imagine Cup competition thus far?

The coaching sessions were both interesting and fun. It let us discover new Microsoft technologies, such as WPF, in enjoyable conditions (for instance, coaching sessions in the Marcoussis training center).

#### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

From the beginning we wanted to create something useful for everybody which could have an impact on the environment. But we mainly wished to design a product which could interest people first for its decorative purposes, and then, for its educational ones. So we chose WPF technology to take advantage of its design and development possibilities in order to create a beautiful landscape (the decorative aspect) but which could also be interactive and useful (the educational and challenging aspect).

#### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

The competition is an opportunity to meet people from many companies and mainly from Microsoft. So, it would be great to obtain internships at Microsoft in order to work on new Microsoft technologies and learn more.

If we get the opportunity, we would be glad to go further on "our e-cube" project and why not launch a new business!

#### What are you most looking forward to experiencing at the Worldwide Finals in France?

First, we are expecting to have fun with all the people from different countries and to discovering their different cultures. Then, we wish to test our capabilities in this category and try to do the very best we can!

#### Links to more information

<http://ic2008.efrei-microsoft.fr>







## United States



### Franklin Perspectives

Team Member  
Olivia Franklin

#### Project Title

Sustain Your World

##### Project Overview

Sustain Your World is a user interface that will teach people how to become sustainable in their own homes. It shows them that small changes can add up to a large impact on the world.

##### Technology/software used

- Microsoft Expression Blend 2
- Microsoft Expression Design 2
- Microsoft Visual C# 2008 Express Edition
- Adobe Photoshop CS2

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interface Design invitational?

I was inspired to enter the Imagine Cup because I wanted to challenge myself with a new program. I selected the Interface Design invitational because I am confident in my abilities to create Web sites.

##### Background on your team: Who are you and how did you meet?

I am the only individual on my team.

##### Team Experience: What experience did you have with interface design before competing in the Imagine Cup?

I had some experience with interface design but I had never programmed an entire interface before.

##### What has been your favorite part of the Imagine Cup competition thus far?

My favorite part of this competition has been the challenge and the excitement of programming my interface.

##### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

I come up with my idea with lots of brainstorming. I wanted a concept that could get everyone involved with helping to sustain the world. During this project I had to juggle school, and work. The deadline for the entry was the same time as all of my finals, let's just say, I didn't get much sleep :)

I also had struggles learning a whole new program. It is difficult to switch from Flash to Microsoft Expression Blend.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

I do plan to launch a business and I will utilize my interface as a strong portfolio piece.

##### What are you most looking forward to experiencing at the Worldwide Finals in France?

First, we are expecting to have fun with all the people from different countries and to discovering their different cultures. Then, we wish to test our capabilities in this category and try to do the very best we can!

##### Links to more information

[franklinperspectives.com](http://franklinperspectives.com)





## United States



### IU EcoVis

Team Members  
David Roedl  
William Odom

## Project Title Campus Energy Challenge

### Project Overview

As students at Indiana University (IU), USA, we wanted to develop a use of technology to help reduce the environmental impact of the students. To create a meaningful context to and promote more environmentally-conscious behaviors among the student population, we decided to hold a campus-wide competition. From March 20 to April 17 2008, more than 9,000 students living in Indiana University dormitories competed to reduce their energy and water consumption in IU's first-ever Campus Energy Challenge. Throughout the competition, the Energy Challenge Web site provided frequent updates on consumption data, competition standings, and conservation tips. This dynamic web-application evokes a sense of fun and motivation by giving students helpful feedback that supports and encourages their conservation efforts. At the end of four weeks, students conserved an estimated 446,139 KWh of electricity and 613,919 gallons of water. Remarkably, the students' conservation efforts resulted in an estimated \$26,000 in avoided utility costs and 801,454 pounds of carbon dioxide emissions, which is equivalent to taking 67 passenger cars off the road for one year.

The site design features dynamic, interactive data graphics, which allow students to easily compare their consumption with other dorms and track changes over time. The site also includes a list of suggested conservation actions and educational information to raise awareness about climate change and other environmental consequences of resource use. While many information visualization tools exist, rarely has this type of interface been designed for non-experts in mind, and for the purpose of motivating environmental action. Through competition and an engaging user experience, the Energy Challenge Web site seeks to transform perception of the basic resources on which we depend—and so often take for granted—and make them visible, valuable and meaningful. At its core, the Energy Challenge concept and design directly aims to both imagine and contribute to a world where technology enables a sustainable environment.

### Technology/software used

#### Design

- Microsoft PowerPoint 2007
- Microsoft Excel 2007
- Adobe Fireworks CS3

#### Development

- Microsoft SQL Server 2005
- PHP
- XML
- HTML+CSS
- Adobe Flex Builder 3

### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interface Design invitational?

With increasing concerns over global warming and financial costs of energy, energy management is becoming an important and growing area. The theme and spirit of this year's Imagine Cup inspired us to design and develop an innovative technology solution to help students better understand and manage their resource consumption—and ultimately facilitate more sustainable behaviors. Our concept relies on an engaging Web site interface and was a great match to the Interface Design invitational.

### Background on your team: Who are you and how did you meet?

Team IU EcoVis is comprised of David Roedl and William Odom. We both earned our undergraduate degrees in Informatics from Indiana University and are now finishing our M.S. degrees in Human-Computer Interaction (HCI) / Design. Our interests are characterized by a concern for the environment and how the design interventions can improve its collective condition. We've collaborated on school projects for some time now, and we were even friends long before beginning our university studies. Currently, we are both contributing members of the Sustainable Interaction Design Research Group at Indiana University.

### Team Experience: What experience did you have with interface design before competing in the Imagine Cup?

Through coursework and projects as well as general interest, we have had varying levels of experience with interface design. Mostly, our HCI coursework has focused on user-centered design methods, which have influenced our approach to interface design. Also, David has been working as a part-time web designer for several years.

### What has been your favorite part of the Imagine Cup competition thus far?

Our favorite part of the Imagine Cup so far has been interacting with and contributing to an international technology community concerned with issues of environmental sustainability. It is an area that will increasingly become important as we, as a community, continue to design and develop creative approaches to reducing our global environmental footprint. We see the theme of the Imagine Cup competition as an important step towards our collective goal and we have been thrilled to participate in it.

### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

Our idea was mostly inspired by a similar energy contest that occurred at Oberlin College a few years back. Also, in the past year, there has been a growing initiative towards environmental sustainability on the IU campus. These events led us to our idea of creating the Energy Challenge at IU.

One of the biggest technical challenges was in figuring out how to collect data from utility meters in order to display over the web. To do so, we had to collaborate with the utilities staff people and create a new web database using Microsoft SQL Server 2005.

### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

We plan to continue iterating on the Energy Challenge design—implementing and testing new concepts—as well as expanding this same type of concept to other Indiana University buildings (outside of just dormitories). Also, we continue to refine the strategic design plan for the future annual competitions to come. Additionally, we both have professional interests in the green technology sector.

### What are you most looking forward to experiencing at the Worldwide Finals in France?

We are really looking forward to the opportunity to meet and interact with students concerned with issues of technology and sustainability on an international level. It's a great space to exchange ideas and develop new concepts with talented people from all over the world—illustrating that the issue of environmentally sustainability is a problem affecting populations worldwide that requires global thinking, strategies, and solutions.

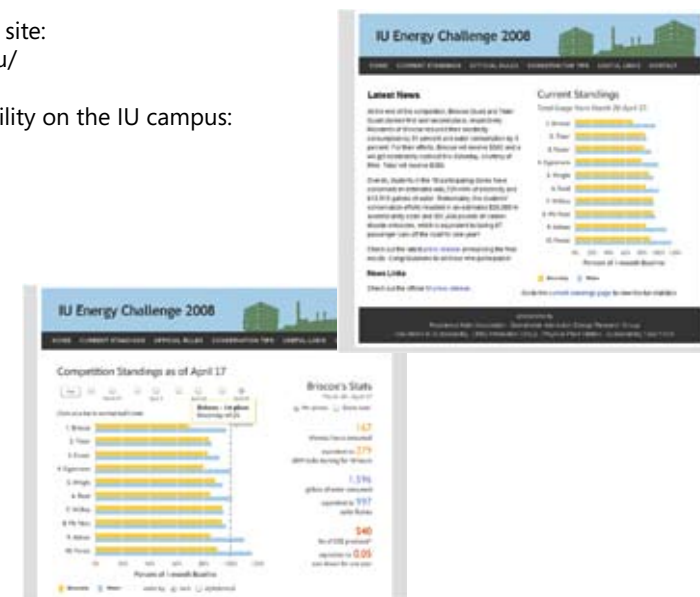
### Links to more information

The official Energy Challenge Web site:  
<http://energychallenge.indiana.edu/>

More information about sustainability on the IU campus:  
<http://www.indiana.edu/~sustain>

David Roedl's Web site:  
<http://www.davidroedl.com>

William Odom's Web site:  
<http://www.willodom.com>





## Interface Design Accessible Technology Award

The Accessible Technology Award is designed to recognize the user interface solution that best leverages the capabilities of Microsoft products and blends them with other technologies to connect people, data, or diverse systems in a new way.

Accessible Technology is technology that can be used by everyone, including people with disabilities, temporary difficulties, or the desire to customize their interactions with technology:

- Difficulties and impairments that impact a person's ability to use technology can be related to vision, dexterity, learning, hearing, language, and communication.
- The need for accessible technology can also stem from temporary physical conditions. For example, while recovering from shoulder surgery, a person may need alternatives to the mouse and keyboard.
- Some people wish to customize how they access technology due to environmental conditions, or simply their personal preference. For example, someone using a workstation in a loud factory may not be able to hear key computer sounds, and may need visual cues instead.

People with physical and cognitive impairments represent a very diverse group - one that is increasing as average life expectancies increase worldwide. They are found in all walks of life, are employed in all fields, and study many different subjects. These users, like all end users, want to use PCs, mobile devices, the Internet, and physical devices - which they expect to work effectively for their needs.

The Winner of this Award was chosen in May 2008 by Microsoft accessibility experts at Microsoft corporate headquarters in Redmond, Washington.

***Congratulations to Team WebAnywhere from the United States!***

Microsoft®  
**Accessibility**  
Technology for Everyone



## United States



### WebAnywhere

Team Member  
Jeffrey Philip Bigham

#### Project Title WebAnywhere: A Screen Reader On-the-Go

##### Project Overview

Most computers are not accessible to blind people. To access the Web, blind computer users employ expensive software programs called screen readers, which both convert information normally displayed visually to audible speech and provide additional shortcut keys that make computer use without a mouse feasible.

Web access is vital because of its value in everything from education, employment, and just staying connected. Furthermore, the Web is becoming a platform on which applications can run, and many traditional desktop applications are being replaced with Web equivalents. Missing out on Web access means missing out on a lot.

WebAnywhere provides a screen reading interface from any computer with an Internet connection, enabling users to access their content wherever they happen to be.

##### Technology/software used

Javascript, Sound Manager 2, PHP.

Although not directly included in our project, WebAnywhere ID is designed to run within popular Web browsers, including Internet Explorer. Windows Narrator is one way that blind Web users can start the system. Speech can be played using Windows Media Player operating as an embedded sound player in the project. Finally, future versions of WebAnywhere will include the option to play speech using the Microsoft TTS engine when available.

##### What inspired you to enter the Microsoft Imagine Cup and why did you choose the Interface Design invitational?

I was inspired to enter the Accessible Technology competition after talking to Cynthia Shelly of Microsoft. She is knowledgeable about accessibility, tireless in her encouragement and support, and a great example of Microsoft's growing dedication to accessible technology.

##### Background on your team: Who are you and how did you meet?

I'm a Ph.D. candidate in the University of Washington Computer Science and Engineering Department in Seattle, Washington, USA. My interests are broadly in human computer interaction and artificial intelligence with a focus on projects impacting Web accessibility.

##### Team Experience: What experience did you have with interface design before competing in the Imagine Cup?

I've worked on a number of projects targeting better interface design for people using screen readers. WebAnywhere is one of those unique projects, however, whose usefulness seems particularly compelling. Of all the projects on which I've worked, WebAnywhere seems most likely to have immediate impact.

##### What has been your favorite part of the Imagine Cup competition thus far?

The people have been the best part of the Imagine Cup thus far. From the other competitors with whom I've interacted on the forums to the organizers of the competition, I've been excited and inspired by their dedication and support.

##### How did you come up with your idea? What personal or technological challenges did you face while developing your project?

The idea for WebAnywhere came naturally out of discussions with people who use screen readers. In particular, many of these users were excited about the fancy new Web 2.0 applications becoming available on the Web, but they were missing out on the biggest advantage that many of these applications provide – the ability to use them from any computer. WebAnywhere makes Web applications accessible to screen reader users accessible to anyone.

Following that early motivation, I've had the opportunity to talk with all sorts of people who have their own motivations for wanting to use WebAnywhere. Web developers want an easy way to check their designs for accessibility without having to buy and install new software, school administrators want to support blind students without having to manage additional software on each machine; and blind Web users want access to the Web without having to spend \$1000 for a screen reader.

The main technical challenge that we overcame was coordinating all of the components of the system so that they worked well together and provided a usable interface. Another substantial technical challenge was developing new prefetching and caching techniques to make the latency inherent in retrieving speech from a remote server acceptable.

##### What do you plan on doing after the Imagine Cup finals in France? Do you plan to use your project to launch a new business?

I'm working hard to release WebAnywhere as a service that anyone can use for free and are actively seeking support to help make this happen.

##### What are you most looking forward to experiencing at the Worldwide Finals in France?

I'm most looking forward to seeing the exciting and imaginative projects being presented by other competitors in Paris and meeting the people behind them.

##### Links to more information

###### Project Homepage:

<http://Webinsight.cs.washington.edu/Webanywhere/>

###### Open Source Project Page:

<http://Webanywhere.googlecode.com/>



## About the Microsoft Academic Team



It's been a long journey to the Imagine Cup finals and chances are you've already met someone on the Microsoft Academic team on the way. We are a worldwide team of over 100 people who spend our days working with students and faculty to develop Microsoft's relationship with academia.

Our mission is to empower students like to achieve your hopes and dreams in both your personal and professional lives. The Imagine Cup is just one of the programs that we work on throughout the year.

**Channel 8** is the Microsoft online community for technology students. Its purpose is to create a venue to help students share ideas with peers, engage with technology experts, and explore exciting new technologies. By providing the ability to communicate and collaborate online, Channel 8 helps students overcome borders and cultural barriers, gain technical resources, and have fun.  
<http://channel8.msdn.com/>

**Microsoft DreamSpark** is a community-based portal where students can download Microsoft's industry-leading software development, gaming, and design tools—at no charge.  
<https://downloads.channel8.msdn.com/>

**Faculty Connection** is a community portal that offers technology educators access to free Microsoft® software, curriculum resources, and real-time communication forums for sharing ideas. This one-stop shop helps educators meet the demands of teaching technology today by putting cutting-edge.  
[www.microsoft.com/faculty](http://www.microsoft.com/faculty)

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[www.msdnaa.net](http://www.msdnaa.net)

**Microsoft Student Partners** is a global initiative that provides university students with a passion for technology with real-world skills and resources to help them prepare for successful careers.  
<http://student-partners.com/>

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[www.microsoft.com/studentstobusiness/home](http://www.microsoft.com/studentstobusiness/home)

We also give regular technical presentations on school campuses throughout the world and bring your feedback to the product development team, giving guidance on Microsoft's next generation technologies.

We wish you all luck, but most of all, we hope that you have a great experience.

**The Microsoft Academic Team**

*Microsoft Academic Programs offer an unprecedented technology experience that paves the way for an exciting future full of possibilities and success.*

## Imagine Cup Innovation Accelerator

### Turning passion into reality through Microsoft Innovation Accelerator

The top six Imagine Cup finalist teams will earn a unique opportunity to move from innovators to entrepreneurs through the support of the Innovation Accelerator program. This program provides expert guidance and training to help the top-ranked teams transform their ideas into a business.

Each team receives coaching from some of the world's most successful technology leaders and comprehensive training on building a business from the ground up. The teams maintain the intellectual property rights for their projects and can choose to create businesses in their home countries or seek venture capital elsewhere. Through Innovation Accelerator:

*Student team finalists can—*

- Gain the knowledge necessary to take their idea from concept to start-up.
- Learn how to create a solid business plan and market their idea.
- Establish industry connections to obtain venture capital.

Innovation Accelerator enables students to bring their concepts to market, turning their creativity into a commercial reality. They can use their innovation to make a real difference locally and globally, while fulfilling their own dreams.

*"Empower the student, enable the ecosystem."*

# Microsoft would like to thank the following judges for their support of the Imagine Cup 2008 World Finals

## Software Design Judges

<b>Manar Al-Hashash</b>	General Manager, Dot Design
<b>Dennis Anderson</b>	Professor of Information Systems, Pace University
<b>Ricardo Anindo</b>	Associate Professor, Institute of Computing, University of Campinas, Brazil
<b>Jorge Becerra</b>	Professor of Software Engineering, Univ. of Sao Paolo, Brazil
<b>Vincent Bellet</b>	IT Project Manager for Tactical Development Team, Société Générale Corporate Investment & Banking, Corporate Systems, Paris
<b>Guillaume Belmas</b>	Software Architect, Exakis, France
<b>Tiago Cardoso</b>	Professor of Science and Technology at the New University of Lisbon
<b>Steve Cha</b>	Professor, Department of Computer Science and Engineering, Korea University, Seoul, Korea
<b>Nannette Cutliff</b>	Vice President and Chief Information Officer, Pacific Service
<b>Marcia Helena Costa Fampa</b>	Professor of the Department of Computer Sciences, Institute of Mathematics, Federal University of Rio de Janeiro
<b>Viktor P. Gergel</b>	Dean of University of Nizhni Novgorod
<b>Tadeusz Golonka</b>	Microsoft Regional Director in Poland
<b>Patricia Graf</b>	Corporate Fundraiser at World Wide Fund for Nature, WWF - Germany
<b>Guido Gryczan</b>	Visiting Professor, Department of Informatics, University of Hamburg, Germany
<b>Edward Granger Happ</b>	Chief Information Officer Save the Children
<b>Edwin Jongsma</b>	Capability Director, Solution Development, Avanade Netherlands BV
<b>Dr. C. N. Krishnan</b>	Director, Anna University, K. B. Chandrasekhar Research Centre in the Madras Institute of Technology
<b>Vesa Lappalainen</b>	Professor, University of Jyväskylä, Finland
<b>Jimmy Ho Man Lee</b>	Professor, Department of Computer Science and Engineering and Associate Director Centre for the Advancement of Information Technology in Education
<b>Yannick Lejeune</b>	Director of Internet Marketing & Systems for IONIS Education Group
<b>Ignacio Lopez</b>	Co-founder, Wormhole
<b>Philip "Perry" Lowe</b>	Co-founder, the Consortium for the Study of Virtual Global Collaboration
<b>Rob Miles</b>	Lecturer, Department of Computer Science at the University of Hull, UK
<b>Christine Mingins</b>	Co-founder, Readify and ucube; International Director of the IBM Xi'an Software Innovation Centre in Chin
<b>Lumko Caesario Mtimde</b>	Chief Executive Officer, Media Development and Diversity Agency
<b>Kerem Ozsu</b>	Chief Executive Officer, I-CON Technologies, Istanbul, Turkey
<b>Stavros M. Panas</b>	Professor, Vice Rector, and Chairman of Research Committee Aristotle University of Thessaloniki, Greece
<b>Paul Polak</b>	Founder, International Development Enterprises and author of Out of Poverty
<b>Jane Prey</b>	Senior Program Manager, Microsoft Research External Research
<b>Talal Rahbi</b>	Chief of Information & Awareness Division - Information Technology Authority ICT
<b>Nick Randolph</b>	Founder and Solution Architect, N Squared Solutions
<b>Netika Raval</b>	Senior Manager, Corporate Marketing Peregrine Systems and Fellow at the Digital Vision Program, Stanford University
<b>Grégory Renard</b>	CTO Wygwam and Regional Director, Microsoft Belgium & Luxemburg
<b>Wilson Ruggiero</b>	President, SCOPUS Tecnologia Ltda.
<b>Giorgio Sardo</b>	User Experience Consultant, Microsoft UK
<b>Kai-Uwe Sattler</b>	Professor Database and Information Systems group at the Faculty of Computer Science and Automation of the Technical University of Ilmenau
<b>John Taylor</b>	Founder and Managing Director, TR Control Solutions
<b>Charles Torre</b>	Senior Technical Evangelist, Microsoft
<b>Kentaro Toyama</b>	Assistant Managing Director, Microsoft Research India
<b>Etienne Tremblay</b>	Senior Software Architect, EDS Canada
<b>Ovid Tzeng</b>	Distinguished Research Fellow at Academia Sinica, Taiwan
<b>Vincent Vergonjeanne</b>	Sr. Software Design Engineer, Microsoft, EDC Ireland
<b>Dan Yang</b>	Vice President, Chongqing University; Director of Administrative Committee of Huxi Campus
<b>Roslan Bakri Zakaria</b>	Co-founder, the New Entrepreneur Forum

## Embedded Development Judges

<b>Ilya Bokshteyn</b>	Director of Windows Embedded Marketing, Microsoft
<b>Pierre Cauchois</b>	Embedded Developer Evangelist, Windows Embedded Marketing, Microsoft
<b>Shirley Chen</b>	Product Strategy Manager, VIA Technologies, Inc
<b>Anil Dhawan</b>	Program Manager, Windows Mobile, Microsoft
<b>Olivier Fontana</b>	Group Product Manager, Windows Embedded Marketing, Microsoft
<b>Dr. Jim Hamblin</b>	Professor School of Electrical and Computer Engineering, Georgia Tech
<b>Diane Nye</b>	Group Marketing Manager, Windows Embedded Marketing, Microsoft
<b>Samuel Phung</b>	Vice President of Sales & Marketing ICOP Technology Inc.

## Game Development Judges

<b>Ian Bogost</b>	Assistant Professor at the Georgia Institute of Technology and Founding Partner at Persuasive Games LLC
<b>John Nordlinger</b>	Senior Research Program Manager, Microsoft Research, Microsoft
<b>Suzanne Seggerman</b>	Co-founder and President of Games for Change
<b>Bill Wagner</b>	Product Manager, XNA Game Studio, Microsoft

## IT Challenge Judges

<b>Chris Amaris</b>	Partner & CTO Convergent Computing
<b>Jeff Guillet</b>	Consultant, Convergent Computing
<b>Valy Grevau</b>	Assistant Professor, Department of Business Information Systems Faculty of Economic and Business Administration "Alexandru Ioan Cuza" University of Iasi
<b>Rand Morimoto</b>	President & CEO Convergent Computing

## Algorithm Judges

<b>Brian Conte</b>	President, Fast Track
<b>Przemyslaw Debiak</b>	Faculty of Mathematics, Informatics and Mechanics, Warsaw University, Poland
<b>Daniel Magliola</b>	Founder of Crystal Gears

## Photography Judges

<b>Benjamin Gauthey</b>	Spécialiste Expériences Numériques, Division Plate-Forme et Ecosystème Microsoft France
<b>Marcelo Souza</b>	Professor of Multimedia Department of Arts Institute of Universidade Estadual de Campinas
<b>Manuel Toscano</b>	Principal, ZAGO LLC

## Short Film Judges

<b>Victor "Buddy" Brown</b>	Actor
<b>Michael Johnstone</b>	Director, New Business Group Digital Entertainment, Paramount Pictures
<b>Laurie Luh</b>	Director, Participant Media
<b>Rosalind Ruesga</b>	Writer, researcher and co-founder of Tails of the City
<b>Courtney Sexton</b>	Director, Participant Media

## Interface Design Judges

<b>Tom Chi</b>	Senior Director, Yahoo!
<b>Neil Churcher</b>	Head of Design, Orange Group Design & Usability
<b>Tracy Gray</b>	Director of NCTI and a Managing Research Scientist at AIR
<b>MP Ranjan</b>	Designer and Faculty, Head, Centre for Bamboo Initiatives at National Institute of Design, Ahmedabad
<b>Surya Vanka</b>	Manager of User Experience Excellence, Engineering Excellence, Microsoft

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Gourmet cuisine, a wide selection of fine wines and luxurious atmosphere, all served with the French touch, are just part of the experience of flying with Air France. Whether flying in l'Espace Première (First Class), l'Espace Affaires (Business Class), or Tempo (Economy Class), Air France offers the largest cinema of the sky, with over 85 on-demand movies on individual screens. And, of course, complimentary champagne is offered in every class.

Air France was recently named the "Best Trans-Atlantic Airline" for the third consecutive year by Global Traveler's Reader Survey.

Corporate sustainability is an important priority for Air France, focusing on disadvantaged children around the world and the environment. Earlier this year, the Air France Group committed to investing an annual 2 billion euros towards reducing the amount of jet fuel used and is stepping up its fleet modernization program. The new aircraft will reduce over 20% of its CO2 emissions and fuel consumption. Air France has also partnered with the GoodPlanet Association to further offset carbon emissions by funding different programs. For the third consecutive year, Air France is the only airline to be listed on both Dow Jones Sustainability Indexes.



Avanade is a global IT solutions consultancy dedicated to using the Microsoft platform to help enterprises achieve profitable growth. Through proven solutions that extend Microsoft technologies, Avanade helps enterprises increase revenue, reduce costs, and reinvest in innovation to gain competitive advantage. Our consultants deliver value according to each customer's requirements, timeline and budget by combining insight, innovation and the talent of our global workforce. Founded in 2000 by Accenture and Microsoft Corp., Avanade has more than 7,800 professionals serving customers in 22 countries worldwide. Avanade is a Microsoft Gold Certified Partner and has been recognized for our commitment to Microsoft, its customers and solutions with the Partner of the Year and the Microsoft Business Solutions President's Club, Inner Circle and Pinnacle awards.



BT is one of the world's leading providers of communications solutions and services operating in 170 countries. Its principal activities include the provision of networked IT services globally; local, national and international telecommunications services to our customers for use at home, at work and on the move; broadband and internet products and services and converged fixed/mobile products and services. BT consists principally of four lines of business: BT Global Services, Openreach, BT Retail and BT Wholesale.

In the fiscal year that ended March 31, 2008 BT Group plc's revenue was £20,704 million with profit before taxation and specific items of £2,506 million.

British Telecommunications plc (BT) is a wholly-owned subsidiary of BT Group and encompasses virtually all businesses and assets of the BT Group. BT Group plc is listed on stock exchanges in London and New York.

For more information, visit [www.bt.com/aboutbt](http://www.bt.com/aboutbt).



As a world leader in 3D and Product Lifecycle Management (PLM) solutions, Dassault Systèmes brings value to more than 100,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire lifecycle of products from conception to maintenance to recycling. The Dassault Systèmes portfolio consists of CATIA for designing the virtual product - SolidWorks for 3D mechanical design - DELMIA for virtual production - SIMULIA for virtual testing - ENOVIA for global collaborative lifecycle management, and 3DVIA for online 3D lifelike experiences. Dassault Systèmes is listed on the Nasdaq (DASTY) and Euronext Paris (#13065, DSY.PA) stock exchanges. For more information, visit <http://www.3ds.com>.



## GAMES FOR CHANGE

Games for Change (G4C) provides support, visibility and shared resources to organizations and individuals using digital games for social change. This is the international nexus and primary community of practice for those interested in making digital games about the most pressing issues of our day, from poverty to race, from global conflicts to the environment. We are the social change/social issues branch of the Serious Games Initiative. Our partners include Microsoft, The MacArthur Foundation, MTV, Participant Productions, The UN, and the AMD Foundation among others. This past year we have presented at conferences and events around the world, from the Sundance Festival to the Harvard Human Rights Conference, from the World Economic Forum at Davos, to Global Content Forum Seoul. Our annual festival, now in its fifth year has been called "the Sundance of videogames" for "socially-responsible game designers" and this year featured the Honorable Justice Sandra Day O'Connor as our closing keynote.



## i n v e n t

HP is a technology solutions provider to consumers, businesses and institutions globally. The company's offerings span IT infrastructure, global services, business and home computing, and imaging & printing. HP focuses on simplifying technology experiences for all of its customers — from individual consumers to the largest businesses. HP's mission is to invent technologies and services that drive business value, create social benefit and improve the lives of customers — with a focus on affecting the greatest number of people possible. HP is among the world's largest IT companies, with revenue totaling \$110.4 billion for the four fiscal quarters ended April 30, 2008.

For more information, visit [www.hp.com](http://www.hp.com)



A VIACOM COMPANY

Paramount Digital Entertainment (PDE) is a division of Paramount Pictures Corporation. PDE develops and distributes filmed entertainment across worldwide digital distribution platforms including online, mobile and portable devices, videogames, virtual worlds and emerging technologies.

Paramount Pictures Corporation (PPC), a global producer and distributor of filmed entertainment, is a unit of Viacom (NYSE: VIA, VIA.B), a leading content company with prominent and respected film, television and digital entertainment brands. The company's labels include Paramount Pictures, Paramount Vantage, Paramount Classics, DreamWorks, MTV Films and Nickelodeon Movies. PPC operations also include Paramount Digital Entertainment, Paramount Home Entertainment, Paramount Pictures International, Paramount Licensing Inc., Paramount Studio Group, and Worldwide Television Distribution



Novotel offers nearly 400 hotels and resorts located in the heart of major international cities, business districts, and tourist destinations. Everywhere, the brand upholds its fundamental values of modernity, good design, simplicity and efficiency so that today's travellers feel naturally at home.

Through a consistent top quality offer, Novotel contributes to the well-being of business and leisure travellers alike. Guests will always find spacious rooms with flexible features adapted to both work and relaxation, a balanced choice of food and beverages available around the clock, and friendly, attentive staff, plus children's play areas, fitness centres and places to relax

Meeting@Novotel provides the perfect combination of customized planning and guaranteed services that business men and women need to organize their events.

Family&Novotel reflects Novotel's expertise in catering to family holidays. At easy-on-the-budget prices, families enjoy a special welcome and many extras just for the children.

Novotel has long been committed to promoting sustainable development through its active involvement in the Accor Group's Earth Guest program. Today, it reaffirms this position by pledging to achieve Green Globe environmental certification for its entire network by 2010.

In 2008, the Novotel network includes 387 hotels and resorts, representing a total of more than 69,000 rooms, in 61 countries. By 2010 it will have an additional 20,000 rooms and be present in 70 countries.



## Windows Live™

The Windows Live platform of Web services provides a platform that lets your customer share information and content to create vibrant online communities and social networking spaces. This will enable partners to extend their existing applications using global, industry-leading Web services or build new Web applications that leverage Microsoft core infrastructure and Web services platform. The central focus of this powerful new platform is built around four simple ideas: Build community-driven applications; enable users to store and access information from anywhere, on any device; communicate and build connection; and maintain trust. To learn more visit [dev.live.com](http://dev.live.com).

*The Windows Live team sponsors the Software Design Windows Live Award.*



## Interoperability by Design

### Microsoft Interoperability Team

Interoperability enables innovation and opportunity. Job market success comes easily to those who can recognize the opportunity for a mixed-technology solution and effectively leverage the interoperability of Microsoft products with other products. Bright minds are constantly developing solutions that enable new interoperability scenarios, such as sharing media any format across any number of devices, or mashing up new cross-platform applications and services on the Internet. To learn more visit <http://www.microsoft.com/interop/>.

*The Interoperability Team sponsors the Software Design Interoperability Award.*

## Microsoft® Accessibility

Technology for Everyone

### Microsoft Accessible Technology Business Unit

Accessibility makes it easier for anyone to see, hear, and use a computer, and to customize their computing environment according to their own preferences, needs, and abilities. For many people, accessibility is what makes computer use possible. At Microsoft, our mission is to enable people and businesses throughout the world to realize their full potential. We consider our mission statement a promise to our customers. We deliver on that promise by striving to create technology that is accessible to everyone—including people who experience the world in different ways because of impairments and disabilities. To learn more visit [www.microsoft.com/enable/microsoft/mission.aspx](http://www.microsoft.com/enable/microsoft/mission.aspx).

*The Accessibility Team sponsors the Interface Design Accessible Technology Award.*



Unlimited Potential is Microsoft's long-term commitment to provide relevant, accessible and affordable Information & Communication Technology (ICT) to underserved people around the world through the use of technology, training and partnerships with local governments, NGOs, IGOs, educators, and community and business leaders. In the short-term, Unlimited Potential aims to reach the next 1 billion people by 2015 by exploring solutions in three key interrelated areas. Each is crucial to developing sustained economic opportunity:

- Transforming education
- Fostering local innovation
- Enabling jobs and opportunities

In these three areas, Microsoft Unlimited Potential can create the greatest possible impact in building a virtuous cycle of sustained social and economic development. This cycle drives communities; helps build connections to form new communities; is fueled by local and global partnerships; and, most importantly, ultimately becomes locally sustainable. Sustainability is a key indicator of effective programs and activities, and is our long-term

measure of success. To learn more visit: <http://www.microsoft.com/unlimitedpotential/default.aspx>.



XNA Game Studio 2.0 enables hobbyists, academics, and independent game developers to easily create videogames for Windows and Xbox 360™ using optimized cross-platform gaming libraries based on .NET. Combined with an active membership in the XNA Creators Club (available from Xbox LIVE® Marketplace), you can also create, debug, and play games on your Xbox 360 console. The Microsoft XNA Team is proud to be a co-sponsor of the 2008 Game Development invitational. To learn more visit <http://creators.xna.com/>.



Xbox 360 is a superior video game and entertainment system delivering the best games, unique entertainment features and a unified online gaming network that revolve around gamers. Xbox 360 has a portfolio of more than 300 games in nearly 40 countries. More information can be found online at <http://www.xbox.com/xbox360>.

## Local Imagine Cup Sponsors

Country/Region	Sponsor Name	Web Site Address
Belgium	Accenture	www.accenture.be
Belgium	Ordina	www.ordina.be
Finland	Avanade Finland	www.avanade.com/fi/
Finland	eCraft	www.ecraft.com/Suomeksi/
Finland	Trainers' House	www.trainershouse.fi/fi/etusivu
France	Agence De l'Environnement et de la Maîtrise de l'Energie	www2.ademe.fr/
France	Avanade France	www.avanade.com/fr/
France	de la Sante de la Jeunesse et des Sports	www.jeunesse-sports.gouv.fr/
France	GoodPlanet	www.goodplanet.org
France	Le Forum des droits sur l'internet	www.foruminternet.org/
France	Mairie de Paris	www.paris.fr/
France	Ministère de l'Écologie, de l'Energie, du Développement durable et de l'Aménagement du territoire	www.developpement-durable.gouv.fr/
France	Ministère de l'Enseignement Supérieur et de la Recherche	www.enseignementsup-recherche.gouv.fr/
France	MSN: La chaîne verte	www.lachaineverte.fr.msn.com
France	Novotel	www.novotel.com
Germany	Accenture GmbH	www.accenture.de
Germany	Avanade Deutschland GmbH	www.avanade.de
Germany	Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (BMU) - English: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	www.bmu.de
Germany	GI	www.govint.org/german/finterviews.html
Germany	IEEE	www.ieee.de/
Germany	Naturschutzbund Deutschland e.V. (NABU) - English: Nature Conservancy Association of Germany	www.nabu.de/
Germany	Bundesanstalt Technisches Hilfswerk (THW) - English: Federal Agency for Technical Relief	www.thw.bund.de/
Germany	WWF Deutschland (WWF) - English: World Wildlife Fund Deutschland	www.wwf.de/
India	Centre for Innovation, Incubation & Entrepreneurship at IIM-Ahmedabad	www.ciieindia.org
India	digit	www.thinkdigit.com
India	National Association of Software and Services Companies (NASSCOM)	www.nasscom.in

Country/Region	Sponsor Name	Web Site Address
Ireland	Enterprise Ireland	www.enterprise-ireland.com/
Ireland	Houghton Mifflin Harcourt	www.hmco.com/index.html
Ireland	Imagine	www.imagine.ie/
Ireland	Lenovo	www.lenovo.com/ie/en/
Ireland	Lero	www.lero.ie/
Italy	Avanade Italy	www.avanade.com/it
Italy	Federparchi	www.federparchi.it
Korea	Ministry of Education, Science and Technology	www.mest.go.kr
Mexico	Aceleradoras de Empresas Tecnológicas (TechBa) - English: Technology and Business Accelerator	www.techbasv.com/joomlmain
New Zealand	Singapore Airlines	www.singaporeairlines.co.nz
Poland	Institute of Industrial Design	www.iwp.com.pl/
Russia	Akzia (English: Action Online??)	www.akzia.ru
Russia	APKIT - English: Russian Information & Computer Technologies Industry Association	www.apkit.ru
Russia	Compulenta	www.compulenta.ru
Russia	Hacker Magazine	www.xaker.ru
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Serbia	PEXIM Solutions	www.pexim.co.yu
Serbia	Telenor Serbia	www.telenor.rs/
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Turkey	Casper	www.casper.com.tr
Turkey	Chip Online	www.chip.com.tr
Turkey	TEMA - English: The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats	www.tema.org.tr



## Imagine Cup 2009

The world is asking for your help. Can you hear it?

People are starving. Diseases ravage communities and no matter how hard they try, some people cannot get a basic education. The environment is in trouble and we have to help the world develop in a sustainable way. It seems like too much to take on. But we can't just throw up our hands and give up. Answers could be found in any one of a thousand ideas that happen every day. Solutions might be in the next few lines of code, a photo or even a simple game that catches on and teaches the world a lesson.

These are the first steps to doing something that really matters. Technology can be a force multiplier on the ideas and that's why the Imagine Cup happens every year.

We need everyone – software programmers, hardware developers, artists and dreamers - to imagine a better world - then make it happen. Over 150,000 students from over 100 countries will come together and compete to help find the answers. And no matter who comes up with the best solutions – everybody wins.

### **One World. Unlimited Possibilities.**

For 2009 the Imagine Cup is challenging the world's most talented students to "Imagine a world where technology helps solve the toughest problems facing us today." For some this will be using technology to help a brother or sister get an education and for others it will be about entirely new approaches for medicine or finding ways to counter the inequalities that exist between genders around the world. It may be ensuring the sustainability of our planet and might even be as focused as universal primary education. Yeah, it's that important.

In 2009, the Imagine Cup world finals will be held in Cairo, Egypt. Egypt is one of the most populous countries in Africa and the Middle East and the great majority of its people live near the banks of the Nile River.

Egypt is famous for its ancient civilization and some of the world's most famous monuments. Winners will find that this magical nation holds the key to history, ancient civilization and perhaps the future of technology.

And oh yes...there's also the pyramids.

## A Message from Dr. Tarek Kamel

Just as the Imagine Cup competition is a wonderful celebration of creativity and inspiration so too is Egypt, with its rich history, cultural heritage, and present day vibrant society and economy.

As an old country and a young nation, Egypt is a natural partner for the Imagine Cup, providing the right blend of a historical, cultural, and professional setting for the young participants of this competition. Although our country is best known for its history, modern-day Egypt also represents the future with its robust economy led by the ICT sector and its growing position of leadership in the area of Information Technology.

I extend a warm and gracious greeting to the Imagine Cup 2008 finalists from Egypt. We look forward to hosting Imagine Cup 2009 in Cairo.

**Dr. Tarek Kamel**  
Minister of Communications and Information Technology  
Egypt



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Ministry of Communications  
and Information Technology  
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The Students to Business (S2B) program is a Microsoft® Community Initiative designed to connect students with Microsoft partners and customers for entry-level jobs and internships. The program is open to any student interested in a career in technology. The jobs require a range of technical and creative skills and the personal passion for innovation.

Students engaged in S2B benefit from unique training and certification opportunities, compliments of Microsoft. Various offerings are available to students who are exploring career options, developing job skills or ready to search for an internship or a job. Get started today! [www.microsoft.com/S2B](http://www.microsoft.com/S2B)

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Microsoft Students to Business

# The essence of innovation comes from people

People make things work, boxes don't

Software and hardware are tools. It is people and passion that bring ideas to life.

At BT creativity and innovation have always been at the core of our business and it is the reason we are proud to sponsor the Imagine Cup. In addition to fostering leadership and technical excellence – values that are close to the heart of BT – this competition provides direct support and encouragement to the next generation of technology innovators.

BT and Microsoft have a history of working in partnership, from simple licensing agreements to a Global Alliance Partnership. Championing innovation and research is a legacy that BT celebrates, and it's this that makes the Microsoft Imagine Cup such a valuable opportunity for us to support the next generation of IT entrepreneurs.

“We look forward to helping remarkably talented young people reach their potential and we wish them all the very best of luck!”

Al-Noor Ramji,  
CEO BT Design and BT Group CIO.

[www.bt.com](http://www.bt.com)



Bringing it all together





