ICPC FACT SHEET – First Edition – 14 July 2011

The 36th Annual World Finals of the ACM International Collegiate Programming Contest (ICPC) sponsored by IBM

hosted by the University of Warsaw

About the Contest – http://www.acmicpc.org

The ACM International Collegiate Programming Contest (ICPC) traces its roots to a competition held at Texas A&M in 1970 hosted by the Alpha Chapter of the UPE Computer Science Honor Society. The idea quickly gained popularity within the United States and Canada as an innovative initiative to raise the aspirations, performance, and opportunity of the top students in the emerging field of computer science.

The contest evolved into a multi-tier competition with the first Finals held at the ACM Computer Science Conference in 1977. Operating under the auspices of ACM and headquartered at Baylor University since 1989, the contest has expanded into a global network of universities hosting regional competitions that advance teams to the ACM-ICPC World Finals.

Since IBM became sponsor in 1997, the ICPC has increased by 1000%. Participation in the ICPC and ICPC supported contests has grown even faster involving over thirty thousand of the finest students and faculty in computing disciplines from over two thousand universities from 88 countries on six continents.

The contest fosters creativity, teamwork, and innovation in building new software programs, and enables students to test their ability to perform under pressure. Quite simply, it is the oldest, largest, and most prestigious programming contest in the world.

The annual event is comprised of several levels of competition:

- *Local Contests* – Universities choose teams or hold local contests to select one or more teams to represent them at the next level of competition. Selection takes place from a field of over 300,000 students in computing disciplines worldwide.

- *Regional Contests* (September to December 2011) – This past year 24,915 contestants competed on 8,305 teams from 2,070 universities from 88 countries on six continents at over 250 sites.

- *World Finals* (May 14-18, 2012, Warsaw, Poland) – Hosted by the University of Warsaw, one hundred and five (105) world finalist teams will compete for awards, prizes and bragging rights. These teams represent the best of the great universities on six continents - the cream of the crop.

Battle of the Brains

The contest pits teams of three university students against eight or more complex, real-world problems, with a grueling five-hour deadline. Huddled around a single computer, competitors race against the clock in a battle of logic, strategy and mental endurance.
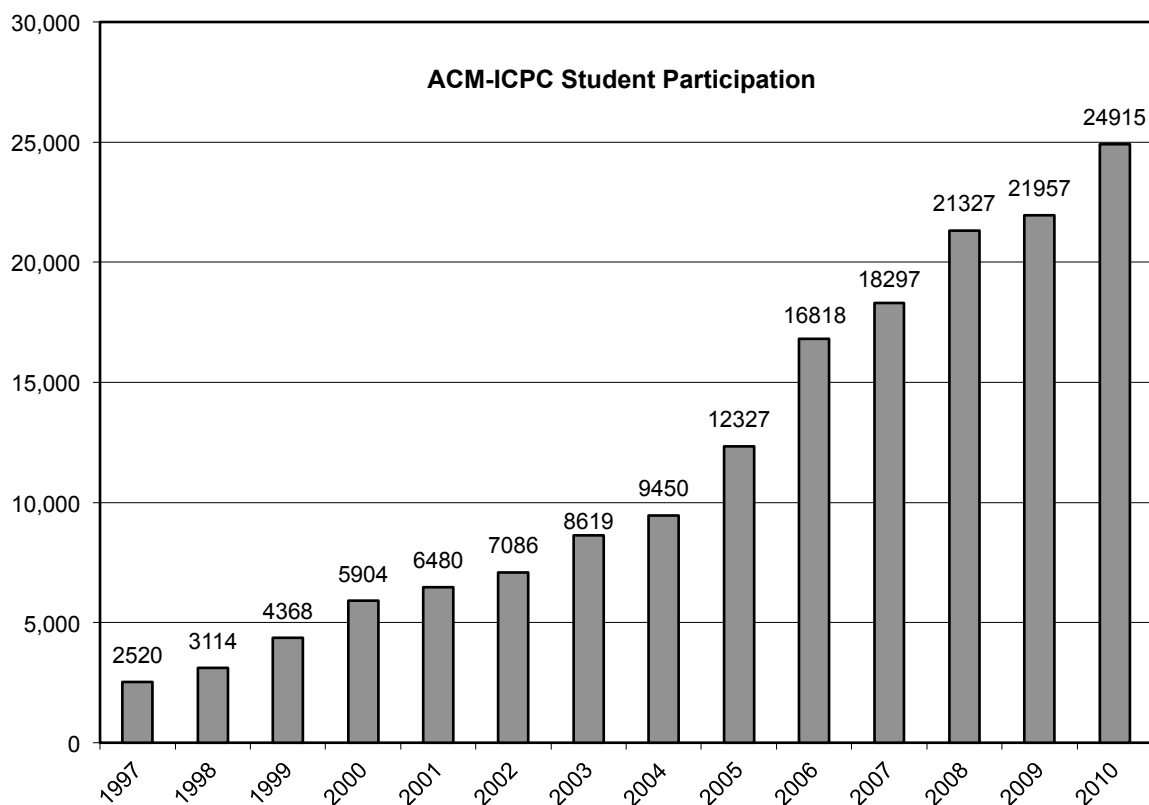
Teammates collaborate to rank the difficulty of the problems, deduce the requirements, design test beds, and build software systems that solve the problems under the intense scrutiny of expert judges. For a well-versed computer science student, some of the problems require precision only. Others require a knowledge and understanding of advanced algorithms. Still others are simply too hard to solve – except, of course, for the world's brightest problem-solvers.

Judging is relentlessly strict. The students are given a problem statement – not a requirements document. They are given an example of test data, but they do not have access to the judges' test data and acceptance criteria. Each incorrect solution submitted is assessed a time penalty.   You don't want to waste your customer's time when you are dealing with the supreme court of computing. The team that solves the most problems in the fewest attempts in the least cumulative time is declared the winner.

To learn more about the ICPC, please visit http://acmicpc.org or http://icpc.baylor.edu/ . Visit the ICPC podcast series at http://battleofthebrains.podbean.com for insights from past contestants and current IBM executives.

Contest Growth

ACM, IBM, UPE, and Baylor University are thrilled that the contest continues to attract the best and brightest students from around the world with 24,915 contestants from 2,070 universities in 88 countries competing this past year. Since the beginning of IBM's sponsorship in 1997, participation has increased 1000%. For more information on previous contests, and last year's final standings and problem sets, please see http://icpc.baylor.edu/ or http://www.ibm.com/university/acmcontest/ . Growth continues.

ACM-ICPC Student Participation

Year	Participation
1997	2520
1998	3114
1999	4368
2000	5904
2001	6480
2002	7086
2003	8619
2004	9450
2005	12327
2006	16818
2007	18297
2008	21327
2009	21957
2010	24915

World Finals 2012 hosted by the University of Warsaw – the final round for the 2011 Regionals

One hundred and five teams from regional contests servicing universities worldwide will be selected to advance to the World Finals to be held in Warsaw, Poland, May 14 – 18, 2012. The World Finals is hosted by the University of Warsaw. UW has two World Championships and regularly advances teams to the World Finals under Jan Madey and Krzysztof Diks. Jan Madey will serve as 2012 World Finals Director. The President of Poland, Bronislaw Komorowski, is Honorary Chair of the 2012 ACM-ICPC World Finals Patrons together with Poland's Ministries of Economy, Science and Higher Education, Interior and Administration, Foreign Affairs, and Education; the Mayor of Warsaw; and the Governor of the Mazowieckie Province.

Recent medal winners in order of finish are:

- 2011 Gold: Zhejiang University (China)
                University of Michigan at Ann Arbor (U. S. A.)
                Tsinghua University (China)
                St. Petersburg State University (Russia)

- 2010 Gold: Shanghai Jiaotong University
  Moscow State University
  National Taiwan University
  Taras Shevchenko Kiev National University

- 2009 Gold: St. Petersburg State University of Information Technology, Mechanics & Optics (Russia)
  Tsinghua University (China)
  St. Petersburg State University (Russia)
  Saratov State University (Russia)

- 2008 Gold: St. Petersburg State University of Information Technology, Mechanics & Optics (Russia)
  Massachusetts Institute of Technology (U. S. A.)
  Izhevsk State Technical University (Russia)
  Lviv National University (Ukraine)

- 2007 Gold: Warsaw University (Poland)
  Tsinghua University (China)
  St. Petersburg State University of Information Technology, Mechanics & Optics (Russia)
  Massachusetts Institute of Technology (U. S. A.)

About ACM
ACM, the Association for Computing Machinery, with more than 100,000 members, is the world's largest educational and scientific computing society, uniting computing educators, researchers, professionals, and students to inspire dialogue, share resources and address the field's challenges. ACM strengthens the computing profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking. For more information, see http://www.acm.org.

About IBM
With the Smarter Planet initiative, IBM believes intelligence allows for the growth and innovation of human life, including the way people live, work, and govern themselves; the way services are ordered and delivered; and the way the environment is protected.

The world is already connected economically, technologically and socially. However, being connected alone is not sufficient. The world needs new generations of talent, leaders and problem solvers to infuse intelligence into our daily lives.

IBM is the world's largest information technology and service provider. Over the last decade, IBM has driven a significant transformation of its business model as the company shifts to higher value areas and improve efficiency of the business. IBM has been building these capabilities to round out the portfolio to address the needs of clients and the society.

IBM has 35,000 software engineers in more than 90 research and development laboratories around the globe, who focus on solving real-world business issues for clients in more than 170 countries. IBM invests in high business values and strategic markets such as Business Analytics and Optimization; Cloud Computing; Smarter Commerce; Business Services; Enterprise Operations; Risk Management; Mobile Computing; and Collaboration. IBM's Watson computer is an example of data analytics. IBM provides industry solutions in areas such as smarter cities, energy, utility, financial markets, chemicals, petroleum, electronics, public service, health care, retail, telecommunications, transportation, manufacturing, media and entertainment. For more information, visit http://www.ibm.com/software.

IBM's Commitment
IBM's sponsorship commitment to the ACM International Collegiate Programming Contest is part of a company-wide effort to advance the next generation of technology leaders and problem solvers who have combined skills of computing science and business management. For more information, visit http://www.ibm.com/university/acmcontest/

The University of Warsaw's Commitment
The University of Warsaw has a historical commitment to excellence in problem solving. Having hosted regional contests, having regularly advanced teams to the World Finals, and with World Championships in 2003 and 2007, UW is pleased to host the 2012 World Finals in Warsaw. The President of Poland, Bronislaw Komorowski, will take Honorary Patronage over the event with institutional support from the Ministries of Economy, Science and Higer Education, Interior and Administration, Foreign Affairs, and Education together

with the Mayor of Warsaw and the Governor of the Mazowieckie Province. For more information, visit
http://www.uw.edu.pl/en/.

Baylor University's Commitment
Baylor University has been the home of the ICPC since the late 1980s, where it has been managed under the
direction of Executive Director and Professor, Dr. William B. Poucher with global enterprise technology
development headed by Dr. Jeff Donahoo, Deputy Executive Director. The ICPC contributes to Baylor's global
mission to encourage the next generation to develop and apply their problem-solving talents to the challenges
that face the world today and the world to come. Chartered by the Republic of Texas, Baylor is the oldest
institution of higher learning in the State of Texas. You may find more about Baylor at http://www.baylor.edu/.

Upsilon Pi Epsilon's Commitment
The Upsilon Pi Epsilon International Computer Science Honor Society recognizes the best students of computer
science and engineering in the world. Since its earliest participation, the UPE has provided support and
scholarships to the World Finals teams. The UPE boasts the longest continuous relationship to the ICPC, dating
back to 1970 with the first event held at Texas A&M by members of the Alpha Chapter of the UPE. For more
information about other UPE activities, its chapters, and its membership click on: http://www.acm.org/upe/.