

Name : Vishal Goyal
Sex : Male
Date of Birth : 23-11-1977
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Areas of Interest: Natural Language Processing, DNA Computing, Theory of Computation, Database Management Systems, Psycho-Linguistics

Educational Qualification:

1. Ph.D. in Computer Science from Punjabi University Patiala. **Machine Translation is available freely for use at website <http://h2p.learnpunjabi.org> and <http://tdil-dc.in/hi2pu>**
Title: Development of a Hindi to Punjabi Machine Translation System.
2. M.Tech.(M.Phil.) (CS) with 70% from Rajasthan Vidyapeeth Deemed University, Udiapur, Rajasthan.
3. M.C.A. with 79% marks from Punjabi University,Patiala.
4. B.Sc.(CS) with 75.5% marks from Panjab University,Chandigarh.
5. 10+2 (NM) with 72% marks from R.S.D. College, Ferozepur City
6. 10th with 82% marks from D.C. Model Sr. Secondary School,Ferozepur City.

Additional Qualification:

Microsoft Certified Solution Developer (MCSD)

Invited Interview Conducted By Delhi Doordarshan Patiala:

“Patiala Darpan”, Available on Youtube at
<https://www.youtube.com/watch?v=gDMTj8diTn4>

Contribution in MHRD Project:

EMMRC, PUP recorded 11 video lectures on DBMS prepared by me as part of their MHRD Project.

Work Experience (Teaching/Research/Industry) : (Total : 15 years approx)

1. Teaching Experience :
 - a. 3 years 2 months at Doaba College Jalandhar at regular post.
 - b. Department of Computer Science, Punjabi University, Patiala as regular Lecturer(CSE) Since 23rd Feb, 2005. (Current Status)
2. Software Industry Experience : 2.2 years
 - a. 6 months at Networkworld Chandigarh as Software Developer
 - b. 1.6 years at DSF internet Services and Net4India Pvt. Ltd as Team Leader.

Funded Projects:

1. Indian Languages Corpora Initiative (ILCI) Phase II as Co-Principal Investigator for Punjabi Language, funded under the Technology Development for Indian Languages(TDIL) program by Ministry of Communications and Information Technology(MCIT), March 2012 to March 2016.

Keynote Address:

1. Faculty Development Programme on Emerging Trends in Artificial Intelligence at Global Institutes, Amritsar during 06-07-2015.
2. National Workshop on Statistical Machine Translation by Hieu Hoang, University of Edinburgh, UK during 30-31st December 2014.
3. National Conference by Giani Zail Singh Engineering College PTU Campus, Bhatinda during 10th December 2014.
4. National Workshop on NLP and PHP, 05th Sept. 2012 to 07th Sept, 2012 organized by GGSCollege for Girls, Kharar.
5. National Conference on Emerging Trends in I.T., 24th March 2012 organized by Sikh National College, Banga.
6. National Conference on Recent Advances in Information Technology and its applications in Industry during 25-26th September, 2011 organized by Jammu University Bhatnagar Campus.
7. Three days National Workshop on On Computational Sanskrit during 11-13 November, 2011 organized by SD College(Lahore), Ambala Cantt.

Session Chaired:

1. Chaired Technical Session on Women Empowerment: Technological Development during International Conference organized by Women Study Center, Punjabi University Patiala on 11-12-2015.
2. Chaired Technical Session during National Conference RITME 2015 on 27-03-2015 organized by MIMIT Malout.
3. Chaired Session during International Conference COMMUNE 2015 organized at University of Kashmir, Srinagar on 18-03-2015.
4. Chaired Session at ICON 2014 organized by Goa University Goa and IIIT Hyderabad during 18-21 December 2014.
5. Track Chair of Student Paper Contest at ICON 2014 organized by Goa University Goa and IIIT Hyderabad during 18-21 December 2014.
6. Chaired Session at National Conference by Giani Zail Singh Engineering College PTU Campus, Bhatinda during 10th December 2014.
7. Chaired Session at UGC Sponsored International Conference organized by APJ College of Fine arts, Jalandhar during 25-26th Feb, 2011.
8. Chaired two technical sessions at National Conference RACS 2011 during 21-22 January 2011 organized by Baba Farid College, Bhatinda.
9. Chaired Session at Baba Farid College, Bhatinda on NLP during 27 Nov, 2009.
10. Chaired the Session at National Conference ISAN during 19-20 June 2009 organized by Chitkara Institute of Engineering and Technology, Rajpura.

Invited Talks / Resource Person / Plenary Talks:

1. Delivered talk on “Punjabi Language Processing: Situation, Challenges and Solutions” during National Seminar at Bela College, Bela during 07-11-2015.
2. Delivered talk on “Punjabi Language Processing: Situation, Challenges and Solutions” during Faculty Development Programme on Emerging Trends in Artificial Intelligence at Global Institutes, Amritsar during 06-07-2015.

3. Delivered talk on “Punjabi Language Processing” during One week long National Workshop on 10-05-2015 organized by Department of Punjabi, Punjabi University Patiala.
4. Delivered talk on “Punjabi Language Processing” during One week long National Workshop on 21-04-2015 organized by DAV College, Jalandhar.
5. Delivered talk on “Punjabi Language Processing” during National Conference RITME 2015 on 27-03-2015 organized by MIMIT Malout.
6. Delivered talk on “Punjabi Language Processing” during International Conference COMMUNE 2015 organized at University of Kashmir, Srinagar on 17-03-2015.
7. Delivered talk on “Punjabi Language Processing” during National Workshop in Women Studies Center, Punjabi University Patiala on 01-03-2015.
8. Delivered talk on Emerging Research Areas in Computer Sc. During National Conference on Indian Languages during 17-18 January 2015 at CUSAT, Cochin.
9. Conducted Session on Statistical Machine Translation (31st December, 2014) at National Workshop on SMT: MOSES Tool Kit organized by Chitkara University in collaboration with Punjabi University Patiala during 30-31st December 2014.
10. Delivered talk on Natural Language Processing and Machine translation among Indian Language Pairs on 7th March, 2014 at National Workshop organized by Department of Computer Applications, CDLU, Sirsa.
11. Delivered talk on Machine Translation at National Workshop organized by GNDEC, Ludhiana on 16th January, 2014.
12. Delivered talk on Machine Translation at National Workshop organized by Thapar University, Patiala on 9th Dec, 2013.
13. Delivered talk on Machine Translation at National Workshop organized by Punjabi University Patiala on 13th Nov, 2013.
14. Delivered talk on NLP at LPU, Phagwara on 09-11-2012.
15. Delivered plenary talk on NLP Projects Showcase and chaired session at Kishtwar Campus, Jammu University, Kishtwar during 2-day National Seminar on IT and its applications in Industry during 03-04 Nov, 2012.
16. Delivered two talks as Resource Person on 08-Oct-2012 during Refresher Course in Computer Science (ID) organized by ASC, Banaras Hindu University, Varanasi.
17. Delivered talk on “Machine translation Basics and its implementation” on 23rd May 2012 at CT Institute of Engineering and Technology, Shahpur Campus, Jalandhar during 1-Week FDP funded by PTU, Jalandhar.
18. Delivered talk on “Career Ahead for IT Students” at PMN College, Rajpura on 20th March, 2012 during 1-day workshop on Entrepreneurship.
19. Delivered talk on “Natural Language Processing and Demonstrations of various NLP applications developed so far” at KMV, Jalandhar on 1st March 2012 during 2-day UGC sponsored National Seminar on “Social Impact of Artificial Intelligence”.
20. Delivered two talks as Resource Person on 17-Dec-2011 during Refresher Course in Computer Applications organized by ASC, Jammu University, Jammu.
21. Invited talk during Computer and IT Session on 13th October during 7th J&K Science Congress Organized by Jammu University, Jammu during 13-15th October 2011.
22. Invited talk at UGC Sponsored International Conference organized by APJ College of Fine arts, Jalandhar during 25-26th Feb, 2011.

23. Invited talk on “Machine Translation Systems” at UGC Sponsored National Conference during 29th January 2011 organized by Pandit Mohan Lal SD College for Girls, Gurdaspur.
24. “Natural Language Processing: New research area in Computer Science” on 28th January, 2011 (Afternoon) at DAVIET, Jalandhar.
25. “Language barrier for communication demolished with technological advancement” on 28th January, 2011 (before noon) at DAV College, Jalandhar.
26. “Demonstration of Hindi to Punjabi Machine Translation System and Natural Language Processing” at National Conference RACS 2011 during 21-22 January 2011 organized by Baba Farid College, Bhatinda.
27. “Natural Language processing”, at DPD College, Zira on 8th November, 2010.
28. “Use of Indian Languages in E-Commerce” at UGC Sponsored National Seminar organized by Khalsa College for Women, Ludhiana on 30th October, 2010.
29. “Demonstration for Hindi to Punjabi Machine Translation System” at UGC Sponsored National Seminar organized by Khalsa College for Women, Ludhiana on 30th October, 2010.
30. Handled one Full Day Sessions and Practical Lab Session at the workshop on NLP organized by CIET, Rajpura during 21-23rd Dec, 2009.
31. Invited Talk at Baba Farid College, Bhatinda on NLP during 27 Nov, 2009.
32. B. D. Arya Girls College, Jalandhar Cantt on “ NLP: A new research area to explore” during 09-11-2009 Before noon.
33. D.A.V. College, Jalandhar City on “Scope of NLP for M.Sc.(CS) Students” during 09-11-2009 After noon.
34. Doaba College, Jalandhar City on “Hindi to Punjabi Machine Translation System” during 10-11-2009 Before noon.
35. Punjabi University Neighbourhood Campus, Rampura Phool on DBMS
36. Rural Development Center for BDOs, Nabha (Three Times)
37. Guru Nanak Dev University Regional Campus, Mukandpur on NLP
38. Baba Gulam Shah Badshah University, Rajouri, J &K on TOC
39. HMV, Jalandhar through Video Conferencing from Patiala Reliance Center on Research areas in Computer Science
40. Baba Gulam Shah Badshah University, Rajouri, J &K on Mobile Computing.
41. Desh Bhaghat Institute of Management and I.T., Mandi Gobindgarh on TOC during 15th Nov, 2009.
42. Mata Gujri College, Fategarh Sahib on TOC during 4th Nov., 2009.
43. Doaba College, Jalandhar on NLP during 23rd November 2008.
44. Presented Demonstration for Hindi-Punjabi Machine Translation System and delivered talk on How to write research paper during AICTE Sponsored Staff Development Programme during 11 June 2009 to 25th June 2009 organized by DCS, BGSBU, Rajouri, J&K
45. Presented Demonstration for Hindi-Punjabi Machine Translation System and invited as panelist for discussing integration of FP in Curriculums at “Deep Drive Faculty Development Programme” during 23-25th June, 2009 organized by Infosys Technologies at Chitkara Campus, Sector 25, Chandigarh.

Research projects Guided:

1. Guiding Seven Ph.D. Research Scholars (03 Registered, 04 Enrolled)
2. Ph.D. Scholars Guided: 02
3. M.Tech./M.Phil:

Professional Bodies Memberships:

1. Life Member of ISTE, New Delhi. (LM 104132)
2. Life Member of The Indian Science Congress Association, Kolkata (L25416)
3. Life member of Punjab Academy of Sciences(L-619)
4. Reviewer for COLING 2012 organized by IIT Bombay, India.
5. Nominated as Single Point of Contact (SPoC) for managing Life and Communication Skills Compulsory Course run at various Punjabi University Affiliated colleges.
6. Editor-in-chief for Research Cell: An International Journal of Engineering Science, Anu Books, Merrut.
7. Editorial Board member for Journal of Emerging Trends in Web Intelligence (JETWI)
8. Editorial Board Member for “Atti della Fondazione Giorgio Ronchi”, Italy.
9. Editorial Board Member for “Journal of Emerging Trends in Computing and Information Sciences (ISSN 2079-8407)”.
10. Editorial Board Member and Publicity Committee Member for IJCSI, France. (Impact Factor 0.242)
11. Reviewer for 'IJCSIS 2009' Technical Committee
12. Reviewer for African Journal of Information and Communication Technology
13. Guest Editor of JETWI Special issue May 2010.
14. Reviewer for IJITKM, Kurukshetra University, Kurukshetra, Haryana, India
15. Editorial Board Member for “DAV Journal of Computing”, Jalandhar, Punjab.
16. Advisory and Organizing Committee Member for NLP Workshop to be organized by CIET, Rajpura during 21-23 December, 2009.
17. Board of Studies Member for PTU, Jalandhar.
18. Board of Studies Member for Mata Gujri College, Fategarh Sahib (An Autonomous College).

Software Developed (Completed):

1. Development of Plagiarism Detection Software for Hindi texts.
2. HMM Based Punjabi Chunker
3. Development of English-Punjabi Parallel Corpus and its management tool
4. Automatic Question Generation System for Punjabi
5. English↔Punjabi Machine Transliteration System
6. Automatic Extraction of MWEs from English-Punjabi Parallel Corpus
7. Development of Text Prediction System for Somali Language
8. Development of Text Prediction System for Amrahic Language
9. SMT Post Editing System for SMT Based Hindi to Punjabi MT System

10. Development of Hindi to Punjabi Machine Translation System using Statistical Approach.
11. Quantitative analysis of websites developed in Hindi and Punjabi.
12. Development of a system for translating Technical Hindi text into Punjabi.
13. Development of Plagiarism Detection Software for Punjabi texts.
14. Automization of Research Cell, Punjabi University, Patiala
15. Automization of Alumni Association, Punjabi University, Patiala
16. Automization of Board Of Studies Meeting Process, Department of Computer Science, Punjabi University, Patiala.
17. Department of Computer Science Website
18. Department of Computer Science Placement Cell
19. Developed Hindi to Punjabi Machine Translation System with an accuracy of about 90% available online for use at website <http://h2p.learnpunjabi.org>. **Copyrighted in 2011.**
20. Automatic Sentence Alignment Of Bilingual Parallel Corpora For Hindi-Punjabi Language
21. Extraction of Collocations in Hindi Text Corpus
22. Hindi Morphological analyzer and generator (Windows Based)
23. Extracting Proverb From Hindi Text And Translating it into Punjabi Text
24. Hindi to Punjabi Transliteration System
25. Development of Algorithm for Sandhi Viched of Compound Hindi Words.
26. Development of N-Gram Algorithm solution for Hindi Word Sense Disambiguation
27. Development Of An Algorithm For Unsupervised Learning Of Morphology For Hindi Language
28. Development of Algorithm for Hindi Text Normalization
29. Development of algorithm for extracting Named Entities from Hindi Text
30. Development of Font Converter for Non Unicode Hindi text to Unicode Encoding and reverse
31. Development of Improved Algorithm for Automatic Word Alignment for Hindi-Punjabi Parallel Corpus
32. Development of Hindi-Punjabi Parallel Corpus using existing Hindi to Punjabi Machine Translation System
33. Development of Name Entity Recognition System for Hindi Corpus
34. Development of Sentiment analyzer for Punjabi.
35. Development of Punjabi to English transliteration system for common nouns.
36. Development of a system for extracting Hindi Proverbs from Hindi text and translating in Punjabi.
37. Development of Hindi Stemmer (Windows Based) for handling OOV words in Hindi to Punjabi MT System
38. Development of Hindi text automatic Font Identification and converting it into Unicode.
39. Development of Extracting Named Entities from Urdu text.
40. Development of Hindi POS Tagger (Windows based)

Software Development in Progress:

1. Development of Urdu to Punjabi Machine Translation System using hybrid approach.
2. Development of Software for Converting Text to ISL video for deaf and dumb persons.

Administration Experience:

1. Organized as Program Chair - International Conference on Natural Language Processing for Regional Languages – regICON 2015 at Department of Computer Science, Punjabi University Patiala from 18-Sept-2015 to 19-Sept-2015.
2. Organized 7-day National workshop on “Multilingual Technologies” at Department of Computer Science, Punjabi University Patiala from 11-Nov-2013 to 17-Nov-2013.
3. Organized 3-day National Workshop on ILCI at Punjabi University Patiala from 19-21 April 2013.
4. Organized 7-day National workshop on “Digital Image Processing using MATLAB” at Department of Computer Science, Punjabi University Patiala from 29-Nov-2012 to 05-Dec-2012.
5. Organized 3-day National workshop on “Train the Trainer: Life and Communication Skills” during 12-14th March 2011 at Department of Computer Science in Collaboration with Placement Cell, PUP and Infosys Technologies Limited.
6. Organizing International Conference – ICISIL 2011 at the department of Computer Science, Punjabi University, Patiala during 9-11 March, 2011. Website: <http://www.icisil2011.org>
7. Organized National Conference – RAFIT 2009 at the department of Computer Science, Punjabi University, Patiala during 9-10 April, 2009. Website: <http://www.punjabiversity.ac.in/rafit2009.html>
8. Acted as Hostel Warden for Shaheed Bhagat Singh Hall , Punjabi University Patiala from 01-09-2006 to 06-09-2007.
9. Acting as Associate Placement Officer for M.C.A. and M.Tech. Students of DCS, PUP. and Incharge Placements for All Science Streams in University.
10. Acting as Executive member for Central Placement Cell of Punjabi University, Patiala appointed by Honorable Vice Chancellor the University.
11. Acting as Coordinator for Departmental Alumni Association.
12. Acting as Executive Member of Central University Alumni Association of Punjabi University, Patiala.
13. Acted as Organization Secretary for National Level Conference RAFIT 2009 at department of Computer Science, Punjabi University, Patiala.
14. Inspected Number of Punjabi University, Patiala affiliated colleges for giving affiliations to colleges for starting new courses.
15. Acted as Organization Secretary for National Level Seminar RAFIP 2009 at department of Computer Science, Punjabi University, Patiala.

16. Acted as Organization Secretary for International Conference on Information System for Indian Languages (ICISIL 2011) during 9-11 March 2011 at department of Computer Science, Punjabi University, Patiala.

Awards and Scholarships:

1. *Young Scientist Awardee 2005* at 8TH Punjab Science Congress at Punjab Science Academy, Punjabi University, Patiala.
2. Honorary Membership by North America Punjabi University Alumni Association, North America.
3. National Merit Scholarship Award by Punjab School Education Board , Mohali.
4. Biography published in Marquis Who's Who in the World (USA) 2009 in Science and Engineering.
5. Certificate of APPRECIATION BY JETWI

Workshops Attended:

1. 1 week workshop at Doaba College , Jalandhar
2. 1 week short term course on "VB.Net" at NITTTR, Chandigarh.
3. 2-week workshop on Natural Language Processing at IIIT, Hyderabad.
4. 3-day workshop "Train the Trainer" by Infosys Technologies, Chandigarh.
5. 11- Day Faculty Enabled Program on Foundation Programme By Infosys Technologies, Chandigarh.
6. 3-day workshop "Train the Trainer" By Infosys Technologies, Chandigarh.
7. 3-day workshop By Infosys Technologies, Chandigarh.
8. 3- Day Faculty Enabled Program on Soft Skills By Infosys Technologies, Chandigarh.
9. 2-Day workshop on SPSS at Thapar University, Patiala

Patents / Copyrights

1. Copyrighted Software Hindi to Punjabi Machine Translation System in 2011.

Papers Published in Journals:

1. Ajit Kumar, Vishal Goyal, Statistical Post Editing System (SPES) Applied to Hindi-Punjabi PB-SMT System, Indian Journal of Science and Technology, Volume 8, Issue 27, October 2015, pp. 1-5.
2. Rajeev Puri, R.P.S. Bedi, Vishal Goyal, Punjabi Stemmer Using Punjabi WordNet Database, Indian Journal of Science and Technology, Volume 8, Issue 27, October 2015, pp. 1-5.
3. Rupinder Sandhu, Vishal Goyal, Kunwar Nain Singh Sandhu, Automating the quality of websites of Punjabi and Hindi newspapers: A case study, IEEE Xplore, (CCIP) 2015, DOI: [10.1109/CCIP.2015.7100715](https://doi.org/10.1109/CCIP.2015.7100715)
4. Mahamed Daud , Vishal Goyal, Predictive Text Entry Method for Somali Language on Mobile Phone, International Journal of Computer Science Trends and Technology (IJCST) – Volume 3 Issue 3, May-June 2015, pp. 274-280.

5. Alemebante Mulu , Vishal Goyal, Amharic Text Predict System for Mobile Phone, International Journal of Computer Science Trends and Technology (IJCSST) – Volume 3 Issue 3, May-June 2015, pp. 113-118.
6. UmrinderPal Singh, Vishal Goyal, Anisha Rani, Disambiguating Hindi Words Using N-Gram Smoothing Models, International journal of Engineering Sciences, Issue June 2014,pp.26-29
7. Manish Kumar, Vishal Goyal, Jaskaran Bhullar, Development of domain based Hindi to Punjabi Machine Translation System - Scope and Challenges, 2013, , Vol9, pp. 49-58.
8. Rakesh Kumar, Vishal Goyal, Ravinder Khanna, N-gram Based Word Sense Disambiguation of Hindi Post Position □□ (sē) in the context of Hindi to Punjabi Machine Translation System, 2013, International Journal of Engineering Sciences, Vol9, pp. 59-67.
9. Harjeet Singh, Ravinder Khanna, Vishal Goyal, Machine Translation system for Standard Punjabi to Malwai Dialect, 2013, International Journal of Engineering Sciences, Vol9, pp. 68-73.
10. Vishal Goyal, Umarinder Pal Singh, Font Identifier and Unicode Converter for Hindi, Napalese Journal of Linguistics, Linguistics Society of Nepal, Kathmandu Vol28, pp. 225-229,ISSN 0259-1006,November 2013.
11. Rupinder Pal Kaur,Vishal Goyal,” Empirically Validating a Web Quality Model for Academic Websites Developed in Punjabi and Hindi: A Case Study” International Conference on Innovations in Engineering and Technology, International Institute of Engineers (IEE), Bangkok,Thailand December 25-26,2013. ISBN No. 978-93-82242-60-4.
12. Rupinder Pal Kaur, Vishal Goyal, Gagandeep Kaur, Web Quality Model for Websites Developed in Punjabi and Hindi , The International Journal of Soft Computing and Software Engineering [JSCSE], 2013, Vol. 3, No. 3, pp.557-563.
13. Deepali, Vishal Goyal, Ankur Rana, “Opinion Polarity Detection-A Survey”,IJCLNLP, September2012, Vol1(1),pp.20-26,ISSN: 2279 – 0756.
14. Rajeev Puri, R.P.S. Bedi, Vishal Goyal, Automated Stopwords Identification in Punjabi Documents, 2012, International Journal of Engineering Sciences, Vol6, pp. 119-125.
15. Anjana Kumari, Vishal Goyal, “Font Convertors for Indian Languages – A Survey”, IJAR, September 2012, Vol. 1, pp. 41-42, ISSN: 2249-555X.
16. Navneet Garg, Vishal Goyal, “Part of Speech Tagger for Hindi And Punjabi: A survey”,IJAETR, July-Aug 2012, Vol.1(2),pp.40-43,ISSN. 2278-7070(Online).
17. Umarinder Pal Singh, Vishal Goyal, “Survey of Named Entity Recognition System for Urdu”, IJAETR, July-Aug 2012, Vol.1(2),pp.52-56,ISSN. 2278-7070(Online).
18. Rajeev Puri, R.P.S. Bedi, Vishal Goyal, Plagiarism Detection in Regional Languages – Its challenges in context to Punjabi documents, International Journal of Engineering Sciences, Vol. 5, pp.296-304.
19. Rohit Kansal, Vishal Goyal, “Survey of Stemming In Context of Urdu”, IJAETR, July-Aug 2012, Vol.1(2),pp.48-51,ISSN. 2278-7070(Online).
20. Rakesh Kumar, Vishal Goyal, Ravinder Khanna,,A Review of Literature on Word Sense Disambiguation, 2011, International Journal of Engineering Sciences, Vol6, pp. 224-230.
21. Gurvir Kaur, Vishal Goyal, “Translating Hindi OOV (Out of Vocabulary) Hindi inflected words in Rule based Hindi to Punjabi Machine Translation System”, IJCIS, 3(3), Issue September 2011, pp.59-75.ISSN:2229-5208

22. Monika Sharma, Vishal Goyal, "Extracting Hindi Proverbs in Machine Translation from Hindi to Punjabi using Relational Data Approach", IJCS July-December 2011 Issue, Vol. 2(2):611-613. ISSN: 0973-7391
23. Kamaldeep, Vishal Goyal, "Hybrid Approach for Punjabi to English Transliteration System", International Journal of Computer Applications 28(1):1-6, August 2011, ISSN:0975-8887.
24. Kamaldeep, Vishal Goyal, "Development of Punjabi to English transliteration System", International Journal of Computer Science and Communications, 2011 2(1):521-526 ISSN:0973-7391.
25. Rajesh Sharma, Vishal Goyal, "Named Entity Recognition Systems for Hindi using CRF Approach", In the Proceedings International Conference for Information Systems for Indian Languages, Patiala, Department of Computer Science, Punjabi University, Patiala, March 9-11, 2011, pp. 31-35, Springer CCIS 139, Germany (2011)
26. Ankur Rana, Vishal Goyal, Vimal K. Soni, "Renaissance of Opinion Mining", In the Proceedings International Conference for Information Systems for Indian Languages, Patiala, Department of Computer Science, Punjabi University, Patiala, March 9-11, 2011, pp. 60-67, Springer CCIS 139, Germany (2011)
27. Karuna Jindal, Vishal Goyal, Shikha Jindal, "Automatic Word Aligning Algorithm for Hindi-Punjabi Parallel Text", In the Proceedings International Conference for Information Systems for Indian Languages, Patiala, Department of Computer Science, Punjabi University, Patiala, March 9-11, 2011, pp. 180-185, Springer CCIS 139, Germany (2011)
28. Vishal Goyal, Gurpreet Singh Lehal, "Hindi to Punjabi Machine Translation System", In the Proceedings International Conference for Information Systems for Indian Languages, Patiala, Department of Computer Science, Punjabi University, Patiala, March 9-11, 2011, pp. 236-241, Springer CCIS 139, Germany (2011)
29. Ajit Kumar, Vishal Goyal, "Comparative Analysis of Tools Available for Developing Statistical Approach Based Machine Translation System", In the Proceedings International Conference for Information Systems for Indian Languages, Patiala, Department of Computer Science, Punjabi University, Patiala, March 9-11, 2011, pp. 254-260, Springer CCIS 139, Germany (2011)
30. Ajit Kumar, Vishal Goyal, "TDIL programme: A Government Initiative", International Journal of Engineering Sciences, Journal Inaugural Issue, 2010, pp. 1-8.
31. Pardeep Kumar, Vishal Goyal, "Development of Hindi-Punjabi Parallel Corpus using existing Hindi-Punjabi Machine Translation System", In the Proceedings IITM '10 Proceedings of the First International Conference on Intelligent Interactive Technologies and Multimedia. Published in ACM, New York, NY, USA, DOI: 1-58113-000-000/0010, ISBN: 978-1-4503-0408-5, pp-114-118.
32. Brahmleen Kaur Sidhu, Arjan Singh, Vishal Goyal, "Identification of proverbs in Hindi Text Corpus and their translation in Punjabi", JCSE, July 2010, Vol 2(1), pp. 32-37, ISSN:2043-9091 (Online).
33. Vishal Goyal, Gurpreet Singh Lehal, "Automatic Spelling Standardization for Hindi Text", In the Proceedings International Conference on Computer & Communication Technology, Allahabad, Moti Lal Nehru National Institute of technology, Allahabad, September 17-19, 2010, pp. 764-767, IEEE Computer Society Press, California, USA (2010)

34. V. Goyal and G. S. Lehal, " Hindi Morphological Analyzer and Generator, ICETET Proceedings of the 2008 IEEE International Conference on Emerging Trends in Engineering and Technology. IEEE Computer Society Press, Washington, DC, USA (2008), pp1156-1159.
35. Vishal Goyal, Gurpreet Singh Lehal, "N-Grams Based Word Sense Disambiguation: A Case Study of Hindi to Punjabi Machine Translation System", International Journal of Translation, Vol 23, No.1, Jan-Jun 2011, pp. 99-113. ISSN: 0970-9819.
36. Karuna Jindal, Vishal Goyal, "Improved Algorithm for Automatic Word Alignment for Hindi-Punjabi parallel corpus", Proceedings of International Conference on Data Engineering and Management (ICDEM 2010), July 29-31, India. Published in Lecture Notes in Computer Science (LNCS Volume 6411), Springer Verlag, Heidelberg-Germany.
37. Rajesh Sharma, Vishal Goyal, "Survey of Name recognition Systems for different languages", PCTE Journal of Computer Sciences, Vol. 6(2),July-December 2009, pp.32-45.
38. Karuna Jindal, Vishal Goyal, "Development of Improved Algorithm for automatic word alignment for Hindi-Punjabi Parallel Corpus", PCTE Journal of Computer Sciences, Vol. 6(2),July-December 2009, pp.150-156.
39. Vishal Goyal, G S Lehal, "Advances in Machine Translation Systems", Language In India, Volume 9, November 2009 Issue, pp. 138-150(2009)
40. Vishal Goyal, G.S.Lehal, "Web Based Hindi to Punjabi Machine Translation System", May 2010 Issue, JETWI.
41. Vishal Goyal, G.S.Lehal, "Evaluation of Hindi to Punjabi Machine Translation System", IJCSI International Journal of Computer Science Issues, Vol. 4, No. 1, 2009, p.p 36-39.
42. Priyanka Gupta, Vishal Goyal, "Implementation of Rule Based Algorithm for Sandhi-Vicheda Of Compound Hindi Words" IJCSI, Volume 3, August 2009,p.p 45-49.
43. Vishal Goyal, Lakhbir Singh, "A Hybrid Word Alignment Approach for Hindi-Punjabi Parallel Text", PCTE Journal of Computer Sciences, January-June 2009,Vol 6 Issue 1
44. V Goyal and G S Lehal, "A Machine Transliteration System for Machine Translation System : An Application on Hindi-Punjabi Language Pair", Atti Della Fondazione Giorgio Ronchi (Italy) (2009), Volume LXIV, No. 1, pp. 27-35 (2009)
45. Vishal Goyal, Gurpreet Singh Lehal, "Comparative Study of Hindi and Punjabi Language Scripts", p.p 67-82, Napalese Linguistics, Journal of the Linguistics Society of Nepal, Volume 23, November, 2008, ISSN 0259-1006
46. Vishal Goyal, Gurdarshan Singh, "Algorithm for Automatic alignment of sentences in Hindi Punjabi parallel Corpus", Journal of Computer Science, Coimbatore, 2005.

Papers Presented at International Conferences:

1. Vishal Goyal, "HMM Chunker for Punjabi", Third Regional Conference on Natural Language Processing, regICON 2015, September 18-19,2015.

2. Shikha Garg, Vishal Goyal, Automatic Question Answer Generation System, LTC 2013, Poland (In process of publication in Springer Journal).
3. Anu Sharma, Vishal Goyal, Opining Mining for Punjabi, LTC 2013, Poland.
4. Ajit Kumar, Vishal Goyal, “Practical Approach for developing Hindi-Punjabi Parallel Corpus”, In Proceedings of LREC 2012 Istanbul, pp. 65-69. (Indexed in Conference Proceedings in Thomson Reuters)
5. Vishal Goyal, Rajesh Mahajan, The Impact of Globalization on Child Labour, International Conference on Human Rights in the age of globalization, India, Nov. 19-21, 2005,183
6. Vikram Singh, Vishal Goyal, Sapna Mehta, “Aspects of Information Security – A Multi Layered Approach, Challenges in Networking and Future of e-Commerce”, India, April 09-10,2005,144-151
7. Vikram Singh, Vishal Goyal, Sapna Mehta, “Mining E-Commerce Data, Challenges in Networking and Future of e-Commerce”, India, April 09-10,2005,286-293.
8. Vishal Goyal, Vinay Chopra, Rajesh Mahajan, “Effective Factors for retaining talent in IT and ITes Sector – A Survey”, International Conference on Services Management, India, March 11-12, 2005, 544-554
9. Vishal Goyal, Kamaljit Kaur, Vikram Sharma, “Segmentation of Hindi Character Recognition System”, ICCII -2005, India, Nov. 12,2005,94-96
10. Vishal Goyal, G.S.Lehal, “Hindi to Punjabi Machine translation System using Direct Approach” , International Conference on Trends in Information Sciences and Computing, organized by SATHYABAMA UNIVERSITY Jeppiaar Nagar, Chennai -119
11. Priyanka Gupta, Rajni Bansal, Vishal Goyal, Fully Automatic General Purpose High Quality Machine Translation System (FGH-MT) – Is it a reality?, ICACCT 2007, APIIT, Panipat.
12. Charankanwal Singh Sodhi, Vishal Goyal, Shalu Jindal, “The Role of ICT in Distance Learning”, ICACCT 2007, APIIT, Panipat.
13. Vishal Goyal, Gurpreet Singh Lehal, “ Hindi Morphological Analyzer and generator”, ICETET-08, G.H.Raisoni College of Engineering, Nagpur, INDIA, 16-19th July, 2008.
14. Lakhbir Singh Garcha, Vishal Goyal, “Automatic Aligning of Hindi Punjabi Parallel Corpus at Word Level”, IACC-09, Thapar University, Patiala, 6-7 March 2009.
15. Lakhbir Singh Garcha, Vishal Goyal, “A Hybrid Word Alignment Approach for Hindi-Punjabi Parallel Text”, DCIT-09, PCTE, Ludhiana,22nd May 2009.

Papers Presented at National Conferences:

1. Vishal Goyal, Vinay Chopra, Mukesh Dhingra, Open Source Operating System for Embedded Systems, U.G.C. Sponsored National Seminar on Embedded Systems, India, Jan 24-25, 2005, 24-29
2. Vikram Singh, Vishal Goyal, P.K.Suri, E-Governance Framework in Haryana, RAFIT 2005, India, March 2-3,2005, 210
3. Vikram Singh,Vishal Goyal,Sapna Mehta, Impact of Internet on Business, RAFIT 2005, India, March 2-3,2005,215
4. Vikram Singh,Vishal Goyal,Rasheed Khan, Misconceptions about E-Governance in India, RAFIT 2005, India, March 2-3,2005,219
5. Vishal Goyal, Dheeraj Jain, DNA Computing – An Emerging Trend, UGC Sponsored National Seminar on Recent Technologies in IT, India, 29 Sept.,2005, 86
6. Vishal Goyal (**Young Scientist Award Winner**), Computing X^n using DNA Strands, 8th Punjab Science Congress, India, February 7-9,2005, 139
7. Vishal Goyal, Challenges and Future to online Education, E-Contents on EDUSAT, India, February 4-5 ,2005, Proceedings on CD
8. Vishal Goyal, KM Approach to E-Governance, Knowledge Management, India, Dec. 4-5 2004, ,95
9. Vishal Goyal, Ravinder Jindal, Ritu Gupta, Challenges to Online Education, Quest for Excellence in HE, India, November 20,2004,93-107
10. Vishal Goyal, Vinay Chopra, Sunil Khullar, Application of Quantum Computing in Wireless Ad Hoc Networks, Issues and Trends in Wireless Networks , India, Dec. 17-18, 2004,48
11. Vishal Goyal, Expert System, Communication and Embedded Systems, India, March 12,2004, 108
12. Vishal Goyal, Machines, Logic And Quantum Physics, Communication and Embedded Systems , India, March 12,2004, 210
13. Vishal Goyal, Mamta Verma, Impact of ICT on Education, IT: Pathway for Transformation of Society, India, March 13-14,2004, 461
14. Vishal Goyal, Sumit Kaushik, LPC: A Speech coding method based on human speech production, Modern Trends in Information and Communication Technology, India, Oct. 20-22,2005,156
15. Gurdarshan Singh, Vishal Goyal, Gurpreet Singh Josan, Survey of various sentence alignment algorithms for Parallel Copora, RAFIT 2007,Department of Computer Science, Punjabi University, Patiala
16. Vishal Goyal, Dolly Watta, Standarizing Hindi Text, IEEE National Conference on Application of Intelligent Systems, (AIS-2008), Hindu College of Engineering, Sonapat.

17. Vishal Goyal, Archana Garg, Narinder Kumar, Word Sense Disambiguation, Futuristic Trends in Engineering and Technology organized by Jan Nayak Ch. Devi Lal Memorial College of Engineering, Sirsa.
18. Aarti Rana, Vishal Goyal, Relative Study of Software Cost Estimating Methods, 11th Punjab Science Congress organized by Thapar University, Patiala.
19. Vishal Goyal, "Survey of various sentence alignment algorithms for Parallel Corpora" , Souvenir M.M.Modi College, Patiala.
20. Priyanka Gupta, Vishal Goyal , "Survey of various POS Taggers: A case study of Hindi language" RAFIT 2009, Punjabi University, Patiala, 9-10 April,2009.
21. Sukhpal Kaur, Vishal Goyal, "Survey of various Unsupervised Algorithms for automatic generation of Hindi Corpus", RAFIT 2009, Punjabi University, Patiala, 9-10 April,2009.

Articles Published (3):

1. "Essentials for On Campus Placements", Competition Affairs National Level Magazine, April 2008 issue.
2. "How to excel in taking job", Competition Affairs National Level Magazine, October 2008 issue.
3. "Motivation: Your gateway to success", Competition Affairs National Level Magazine, November 2008 issue.

Books Published:

1. "A Simplified Approach to Data Structures", Shroff Pub & Dist. Pvt. Ltd, ISBN : 9789351105312
2. Information Systems for Indian languages, Springer CCIS 139, Germany, ISBN: 978-3-642-19402-3, ISSN:1865-0929.
3. Hindi to Punjabi Machine Translation System- MT System between Closely related Language Pair, Lambert Academic Publishing, Germany, ISBN : 978-3-8433-7267-1
4. "Introduction to Computer Education", Twenty First Century Publications.