




University Faculty Details Page on DU Web-site

Title	Prof.	First Name	Punam	Last Name	Bedi	Photograph
Designation		Professor, Department of Computer Science				
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Residence						
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Email		pbedi@cs.du.ac.in ; punambedi@gmail.com				
Web-Page		http://people.du.ac.in/~pbedi/				
Educational Qualification						
Degree		Institution			Year	
Ph.D.		Ph.D., Department of Computer Science, University of Delhi.			1999	
M.Phil. / M.Tech.		M.Tech. (Computer Science), Indian Institute of Technology Delhi.			1986	
PG		M.Sc. (Mathematics), Indian Institute of Technology Delhi.			1984	
UG		B.Sc. (Mathematics), Miranda House, University of Delhi.			1982	
Any other qualification						
Career Profile						
<p>14th March, 2007 – till date: Professor, Department of Computer Science, University of Delhi, India.</p> <p>17th January, 2002 – 13th March, 2007: Associate Professor / Reader, Department of Computer Science, University of Delhi, India.</p> <p>14th March, 1999 - 16th January, 2002: Reader, Deshbandhu College, Department of Computer Science, University of Delhi, India.</p> <p>1st January, 1987- 13th March, 1999: Lecturer / Sr. Lecturer/ Lecturer (Reader's Grade), Department of Computer Science, Deshbandhu College, University of Delhi, India.</p>						

Administrative Assignments
<p>20th Oct., 2017 – 16th April, 2018: Officiating Director, Delhi University Computer Centre.</p> <p>26th June, 2009- 23rd Oct. 2009: Acting Director, Delhi University Computer Centre, University of Delhi.</p> <p>21st Oct. 2005 – 20th Oct. 2008: Head, Department of Computer Science, University of Delhi.</p>
Area of Interests / Specialization
<p>Artificial Intelligence, Web Intelligence, Semantic Web, Intelligent Information Systems, Intelligent Software Engineering, Intelligent Agents, Intelligent User Interfaces, Fuzzy Logic, Genetic Algorithms, Knowledge Representation, Ontologies, Software Engineering , Software Reliability, Requirement Engineering, Trust, Information Retrieval, Personalization, Steganography, Steganalysis</p>
Subject Taught
<p>Undergraduate Programming Fundamentals, Data Structures, Operating Systems, Computer Networks, Software Engineering, Data Base Systems, Computer System Architecture.</p> <p>Postgraduate Artificial Intelligence, Software engineering, Computer System Architecture, Data Structures and File processing, Decision Making using Multi-agent systems, Special Topics in Artificial Intelligence (Multi-agent systems), Neural Networks, Data Communication and Computer Networks, Numerical Computing, Digital Image Processing.</p>
Research Guidance
<p><i>Supervision of awarded doctoral dissertations</i></p> <p>Banati, Hema. 2006. Determining web usability – A pragmatic approach. University of Delhi.</p> <p>Harmeet Kaur. 2007. Trust based decentralized recommender systems. University of Delhi.</p> <p>Gaur, Vibha. 2008. Refining quality requirements to meet users’ expectations. University of Delhi.</p> <p>Marwaha, Sudeep. 2008. Temporal extension to ontologies for semantic web enabled systems. University of Delhi.</p> <p>Chawla, Suruchi. 2011. Information Retrieval using Information Scent and Agents, University of Delhi.</p> <p>Sharma, Ravish. 2012. Recommending Solutions for Complex Systems based on Ant Colony Metaphor. University of Delhi.</p> <p>Thukral, Anjali. 2013. Retrieving and Organizing Web Resources Semantically for Informal e-Mentoring. University of Delhi (Supervisors: Dr. Punam Bedi and Dr. Hema Banati).</p>

Bansal, Roli. 2013. Computationally Intelligent Watermarking for Securing Fingerprint Images. University of Delhi (Supervisors: Dr. Punam Bedi and Dr. Priti Sehgal).

Sharma, Richa. 2013. Adaptive Content Sequencing Incorporating Social Opinion in an e-Learning Environment. University of Delhi (Supervisors: Dr. Punam Bedi and Dr. Hema Banati).

Vats, Aakanksha. 2014. Mobile Process Groups based Trustworthy Coordination in Ad-hoc Network. University of Delhi.

Gupta, Bhavna. 2014. Trust-based Multiagent Service Recommender System. University of Delhi (Supervisors: Dr. Punam Bedi and Dr. Harmeet Kaur).

Vasishtha, Pooja. 2014. Trust and Argumentation based Recommender Systems. University of Delhi.

Agrawal, Sumit. 2014. Context-Aware Trust Based Mobile Recommender System. University of Delhi.

Supervision of Doctoral Dissertations, Thesis submitted

Gautam, Anjali. Matrix Factorization Based Recommender System for Large-Scale Data. University of Delhi.

Bhasin, Veenu. Feature Selection Based Multi-Class Image Steganalysis Using Soft Computing Techniques. University of Delhi.

Jindal, Vinita. Traffic Signals and Route Optimization for Congestion Control in Vehicular Ad-hoc Networks. University of Delhi.

Supervision of doctoral dissertations, under progress

Chhavi Sharma, Artificial Intelligence. University of Delhi (Date of Registration Oct 2013).

Richa, Artificial Intelligence. University of Delhi (Date of Registration Dec 2013).

Singhal, Anuradha, Information Hiding. University of Delhi (Date of Registration June 2014).

Taneja, S. B., Artificial Intelligence. University of Delhi (Date of Registration Oct 2015).

Khurana, Purnima, ***Artificial Intelligence***. University of Delhi (Date of Registration Oct 2017).

Publications Profile

Book Chapters

Bedi, Punam, Vandana Gandotra and Archana Singhal. (2013). Innovative Strategies for Secure Software Development, Chapter 13, in Designing, Engineering, and Analyzing Reliable and Efficient Software: 217-237. IGI-Global.

Bedi, Punam and Sumit Kr, Agarwal. (2013). Aspect-Oriented Recommender System, Chapter 4 in Designing, Engineering, and Analyzing Reliable and Efficient Software: 55-72. IGI-Global.

Bedi, Punam, Roli Bansal and Priti Sehgal (2014). Securing Biometrics using Watermarking, Chapter 4 Research Developments in Biometrics and Video Processing Techniques:65-89, IGI Global.

Bedi, Punam and Pooja Vashisth. (2013). Using Trust and Argumentation in Multi-Agent Recommender Systems. Chapter 14 in Managing Trust in Cyberspace :315-338. CRC Press, Taylor & Francis Group .

Aakansha and Punam Bedi. (2013). Trustworthy Group Coordination in Ad-hoc Networks. Chapter 6 in Managing Trust in Cyberspace: 113-130. CRC Press, Taylor & Francis Group.

Bedi, Punam, Harmeet Kaur, and Bhavna Gupta. (2013). Framework for Selection of Trustworthy Service Providers. Chapter 15 in Managing Trust in Cyberspace:339-359. CRC Press, Taylor & Francis Group.

Research paper published in Refereed /Peer Reviewed Journals

Jindal, Vinita, Punam Bedi. (2018). An Improved Hybrid Ant Particle Optimization (IHAPO) algorithm for reducing travel time in VANETs, Applied Soft Computing, Available online 27 December 2017, ISSN 1568-4946, <https://doi.org/10.1016/j.asoc.2017.12.038>.

Bisht, Sanjay, H.S. Bharati, S.B. Taneja, and Punam Bedi. (2018). Command Agent Belief Architecture to support Commander Decision Making in Military Simulation, Defence Science Journal, 68(1): 46-53 (impact factor 0.500).

Kumari, Tulika, Punam Bedi. (2017). A Comprehensive Study of Shilling Attacks in Recommender Systems, IJCSI International Journal of Computer Science Issues, 14(4): 44-50, July 2017, ISSN (Print): 1694-0814 | ISSN (Online): 1694-0784.

Jindal, Vinita, Punam Bedi. (2017). Reducing Waiting Time with Parallel Preemptive Algorithm in VANETs, Vehicular Communications, 7:58-65, 2017, Elsevier. (Impact Factor: 5.108, UGC Reference List No. - 35543).

Jindal, Vinita, Punam Bedi. (2017). Preemptive MACO (MACO-P) Algorithm for Reducing Travel Time in VANETs, Applied Artificial Intelligence, 31 (2): 174-196, Taylor and Francis (Impact Factor: 0.652, UGC Reference List No. - 15917).

Sharma, Chhavi, Punam Bedi. (2017). CCFRS - Community based Collaborative Filtering Recommender System, ISTA 2016, Journal of Intelligent and Fuzzy Systems, 32(4):2987-2995, IOS Press, Netherlands (Impact Factor: 1.261, UGC Reference List No. - 30259).

Gautam, Anjali, Punam Bedi. (2017). ISTA 2016, Developing Content-Based Recommender System Using Hadoop Map Reduce, Journal of Intelligent and Fuzzy Systems, 32(4):2997-3008, IOS Press, Netherlands (Impact Factor: 1.261, UGC Reference List No. - 30259).

Vasishth, Pooja, Punam Bedi. (2017). A Fuzzy Hybrid Recommender System, Journal of Intelligent

and Fuzzy Systems, 32 (6): 3945–3960, IOS Press. (Impact Factor: 1.261, UGC Reference List No. -30259).

Jindal, Vinita, Punam Bedi. (2016). High Performance Adaptive Traffic Control for Efficient Response in Vehicular Ad Hoc Networks, International Journal of Computational Science and Engineering, InderScience Publishers (In Press, UGC Reference List No. -2764).

Bedi, Punam, Sumit Agarwal, Richa Singh. (2016). Trust and reputation based multi-agent recommender system, International Journal of Computational Science and Engineering, InderScience Publishers (In Press, UGC Reference List No. -2764).

Chawla, S., Srivastava, S., & Bedi, P. (2016). Goals and scenarios based web requirements engineering. Computer Systems Science and Engineering, 31(1), 33-51.

Jindal, Vinita, Punam Bedi. (2016). Vehicular Ad-Hoc Networks- Introduction, Standards, Routing Protocols and Challenges. International Journal of Computer Science Issues (IJCSI). 13(2): 44-55, 2016, ISSN: 1694-0814.

Jindal, Vinita, Punam Bedi. (2016). Reducing travel time in VANETs using MACO with CUDA on GPU, Journal of Network and Innovative Computing (JNIC). 4(1): 200-208, 2016, ISSN: 2160-2174.

Sharma, Neeraj Kumar , Vibha Gaur, Punam Bedi. (2016). Safeguarding Buyers with Attack-Resilient Reputation Parameters. Journal of Theoretical and Applied Electronic Commerce Research (JTAER), 11(1): 46-66, 2016, ISSN 0718–1876 (UGC Reference List No. -11367).

Bedi, Punam, Chhavi Sharma. (2016). Community Detection in Social Networks, Wiley interdisciplinary Reviews: Data Mining and Knowledge Discovery, 6 (3): 115 – 135 (Impact factor 2.111, UGC Reference List No. -32986).

Bedi, Punam, Pooja Vashisth. Deepak Chandoliya and Bipin Kumar Yadav. (2015). Argumentation Enabled Interest-Based Personalized Recommender System, Journal of Experimental and Theoretical Artificial Intelligence (JETAI), 27(2): 199–226, 2015, Taylor and Francis (Impact factor 1.384, UGC Reference List No. -7493).

Chawla, Shailey, Sangeeta Srivastava and Punam Bedi. (2015). Improving the quality of web applications with web specific goal driven requirements engineering, International Journal of System Assurance Engineering and Management, Vol. 6: pp. 1-13, Springer.

Chawla, Shailey, Sangeeta Srivastava and Punam Bedi. (2015). A Qualitative Forward Reasoning Approach for Evaluation of WebGRL Diagrams, Journal of Information and Systems Management, 5(1):1-15.

Bedi, Punam and Ravish Sharma. (2015). AbFR: Ant based Friends Recommendation in Social Tagging Systems, International Journal of Swarm Intelligence, 1(4) : 321-343. InderScience.

Bedi, Punam and Pooja Vashisth. (2014). Empowering Recommender Systems using Trust and Argumentation, *Information Sciences*, 279: 569-586, Elsevier (impact factor 3.893, 5-year impact factor 4.832, UGC Reference List No. -21128).

Dixit V. S., Harita Mehta and Punam Bedi. (2014). A Proposed Framework for Group Based Multi Criteria Recommendations, *Applied Artificial Intelligence* 28:917–956, 2014, Taylor & Francis (Impact factor 0.652, UGC Reference List No. -15917).

Bhasin, Veenu and Punam Bedi. (2014). Steganalysis of Colored JPEG Images using Ensemble of Extreme Learning Machines, *International Journal on Recent Trends in Engineering & Technology (IJRTET)*, 11(1):63-74, July 2014.(UGC Reference List No. - 48133).

Mishra, Anurag, Charu Agarwal, Arpita Sharma and Punam Bedi. (2014). Optimized Gray-scale Image Watermarking using DWT-SVD and Firefly Algorithm. *Expert Systems and Applications*. 41(17): 7858–7867. Elsevier (Impact factor 2.203, 5-year impact factor 3.928, UGC Reference List No. -29150).

Sharma, Neeraj Kumar, Vibha Gaur and Punam Bedi. (2014). Improving Trustworthiness in E-Market Using Attack Resilient Reputation Modeling, *International Journal of Intelligent Information Technologies (IJIT)*, 10(3), 57-82, July-September 2014, IGI Global.

Aakanksha, Ravish Sharma, Punam Bedi. (2014). Trusted and load-balanced Ant-based Routing in Mobile Ad-hoc Networks, *International Journal of Artificial Intelligence and Soft Computing (IAISC)*, 4(2/3):195-211. Inderscience (UGC Reference List No. -49129).

Shailey Chawla, Sangeeta Srivastava, Punam Bedi (2014). Evaluation of Web-specific Goal Oriented Requirements Language Models with Quantitative Reasoning, *ACM SIGSOFT Software Engineering Notes*, 39(2):1-9, March 2014. USA: ACM Digital Library (UGC Reference List No. - 46814).

Sharma, Meera, Punam Bedi and V. B. Singh. (2014). An Empirical Evaluation of Cross Project Priority Prediction, *International Journal of Systems Assurance Engineering and Management*. 5(4):651-663, Springer.

Gaur, Vibha, Anuja Soni, Punam Bedi and S.K. Muttou. (2014). Comparative Analysis Of ANFIS And ANN For Evaluating Inter-Agent Dependency Requirements, (*IJCISIM*), 6 : 23- 34. (UGC Reference List No. - 2771).

Marwaha, Preeti, Hema Banati and Punam Bedi. (2014). BPEL-TC : Orchestration of Temporally Customized Web Services, *International Journal of Computer Information Systems and Industrial Management (IJCISIM)*, 6 : 270 - 278 .

Mehta, Harita, V. S. Dixit and Punam Bedi. (2014).Refinement of Group Recommendations Using User Preferences and Item Attributes, *International Journal of Computer Information Systems and industrial Applications*, 6 : 515-527.

Sharma, Neeraj Kumar, Vibha Gaur and Punam Bedi. (2014). A Dynamic Personalised Product Pricing Strategy using Multiple Attributes in Agent Mediated e-market – A Neural Approach, *Int. Journal of Information and Decision Sciences (IJIDS)* ,6(1) : 46-69. UK: Inderscience (UGC Reference List No. -22941).

Bedi, Punam, Harmeet Kaur and Bhavna Gupta. (2014). Trust based Access Control for Collaborative Systems, *Journal of Experimental and Theoretical Artificial Intelligence (JETAI)*, 26(1):109-126, Taylor and Francis (Impact factor. 1.384). (UGC Reference List No. -7493).

Marwaha, Preeti, Hema Banati and Punam Bedi. (2013) WSDL-TC : Temporal Customization of Web Services. *Journal of Network and Innovative Computing (JNIC)*, 1(1):234-247.

Mehta, Harita, Punam Dixit. (2013). Group Recommendation for Mitigating New User Problem: a modified OCRG, *Journal of Network and Innovative Computing (JNIC)*. 1(1), 99-108, Dynamic Publishers inc., USA.

Bedi, Punam, Vandana Gandotra, Archana Singhal, Himanshi Narang and Sumit Sharma. (2013). Threat-Oriented Security Framework in Risk Management using Multi-Agent System, *Software: Practice and Experience*. 2013; 43:1013–1038, Wiley (Impact factor. 1.008).

Marwaha, Preeti, Hema Banati and Punam Bedi. (2013). FORMALIZING BPEL-TC THROUGH Π -CALCULUS, *International Journal of Web & Semantic Technology (IJWeST)* Vol.4, No.3:11-21. July 2013

Sharma, Richa, Hema Banati and Punam Bedi. (2013). Stigmergic Agent based Adaptive Content Sequencing in an e-Learning Environment, *International Journal of Advanced Intelligence Paradigms (IJAIIP)*, Vol.5, No.1/2:59 – 82. Inderscience. (UGC Reference List No. -2498).

Singh, Jasmeet and Punam Bedi. (2013). Map Construction and Localization using Lego Mindstorms NXT, *Journal of Automation, Mobile Robotics and Intelligent Systems*, Vol 7, No. 3 :22-30 (UGC Reference List No. -21544).

Bedi, Punam and Sumit Agarwal. (2013). SRPRS : Situation-Aware Reputation Based Proactive Recommender System, *Journal of Information Assurance and Security*, Volume8 (2013):220-229 (UGC Reference List No. -43355).

Bedi, Punam and Pooja Vashisth. (2013). Integrating Trust in Argumentation Based Recommender Systems, *Journal of Information Assurance and Security* Volume8 (2013):177-188 (UGC Reference List No. -43355).

Gandotra, Vandana, Archana Singhal, Punam Bedi. (2013). Mitigating Multi-Threats Optimally in Proactive Threat Management, *ACM SIGSOFT Software Engineering Notes*, 38(1):1-7, January 2013. USA: ACM Digital Library (UGC Reference List No. -46814).

Gupta, Bhavna, Punam Bedi and Harmeet Kaur Negi. (2013). An Agent based Reputation System for Unreliable Grid Environment, *International Journal of Modeling and Optimization*, 3(1) : 74-79.

Bedi, Punam, Roli Bansal and Priti Sehgal. (2013). Using PSO in a Spatial Image Hiding Scheme with distortion tolerance. *International Journal of Computers & Electrical Engineering, Special Issue on Recent Developments in Computing and Communications*, 39(2): 640-654, Elsevier (Impact factor 0.837, 5-year impact factor 0.733).

Dixit, V. S., Punam Bedi and Harita Mehta. (2013). Generation of Web Recommendations Using Implicit User Feedback and Normalized Mutual Information, *International Journal of Knowledge and Web Intelligence (IJKWI)*, Vol.4, No.2/3 : 113-141. Inderscience (UGC Reference List No. -43410).

Bedi, Punam, Anjali Thukral and Hema Banati, (2013). Focused Crawling of Tagged Web Resources using Ontology. *International Journal of Computers & Electrical Engineering, Special Issue on Recent Developments in Computing and Communications*. 39(2): 613-628, Elsevier (Impact factor 0.837, 5-year impact factor 0.733).

Goel, Samiksha, Arpita Sharma and Punam Bedi. (2013). Novel approaches for classification based on Cuckoo Search Strategy, *International Journal of Hybrid intelligent Systems (IJHIS)*, 10(3): 107–116, USA : IOS Press (UGC Reference List No. -43401).

Bedi, Punam, Aakanksha and Richa Sharma. (2013). Trust and Context View based Knowledge Sharing in MANets, *International Journal on Trust Management in Computing and Communications (IJTMCC)*, 1(1):85-103. UK:Inderscience (UGC Reference List No. -43423).

Bedi, Punam, Harmeet Kaur and Bhavna Gupta. (2013). A reputation based Service Provider Selection System for delegation of Job by Farmers, Special Issue on "Applications of Artificial Intelligence in Agriculture", *Journal of the Indian Society of Agricultural Statistics (JISAS)*, 67(1):23-32.

Marwaha, Sudeep, Punam Bedi and V. K. Yadav. (2013). Disease and Pests Identification in Maize- A Multilingual Scenario, Special Issue on "Applications of Artificial Intelligence in Agriculture", *Journal of the Indian Society of Agricultural Statistics (JISAS)*. 67(1):107-120.

Bedi, Punam, Sumit Kr. Agarwal. (2013). Aspect-Oriented Trust Based Mobile Recommender System, *International Journal of Computer Information Systems and Industrial Management (JCISIM)*, Volume 5, 354-364.

Roli, Bansal, Priti Sehgal and Punam Bedi. (2012). Securing fingerprint images through PSO based robust facial watermarking. *International Journal of Information Security and Privacy (IJISP)*, 6(2), 34-52, 2012, IGI Global.

Sharma, Richa, Hema Banati and Punam Bedi. (2012). Building Socially-aware e-Learning Systems through Knowledge management, *International Journal of Knowledge Management (IJKM)*, 8(3): 1-27, IGI Global ().

Bedi, Punam and Ravish Sharma. (2012). Trust based Recommender System using Ant Colony for Trust Computation, *Expert Systems with Applications*. 39(1): 1183–1190. Elsevier (Impact factor 2.981, 5-year impact factor 2.879, UGC Reference List No. -29150).

Bedi,Punam, Karima Qayumi and Tejinder Kaur. (2012). Home Security Surveillance System using Multi-Robot System, International Journal of Computer Applications in Technology (IJCAT), 45(4): 272-279, 2012, UK:Inderscience.

Bansal, Roli, Priti Sehgal and Punam Bedi. (2012). Securing fingerprint images using PSO based wavelet domain watermarking, Information Security Journal: A Global Perspective, 21(2): 88–101, 2012, Taylor and Francis.

Bedi,Punam, Anjali Thukral, Hema Banati, Abhishek Behl, Varun Mendiratta. (2011). A Multithreaded Semantic Focused Crawler, Journal of Computer Science and Technology, 27(6): 1233-1242 Nov. 2012. Springer (Impact factor 0.564, 5-year impact factor 0.498). <http://link.springer.com/article/10.1007%2Fs11390-012-1299-8>

Thukral, Anjali, Banati, Hema and Bedi, Punam. (2011). Ranking Tagged Resources Using Social Semantic Relevance. International Journal of Information Retrieval Research (IJIRR), 1(3), 15-34. IGI Global. <http://www.igi-global.com/bookstore/article.aspx?titleid=64169>

Mehta, Harita, Shveta Kundra Bhatia, Punam Bedi and V. S. Dixit. (2011). Collaborative Personalized Web Recommender System using Entropy based Similarity Measure, IJCSI International Journal of Computer Science Issues. 8(6): 231-240.

Gaur, Vibha, Neeraj Kumar Sharma and Punam Bedi. (2011). A Dynamic Model for Sharing Reputation of Sellers among Buyers for Enhancing Trust in Agent Mediated e-market, IJCSI International Journal of Computer Science Issues. 8(6): 142 - 152.

Gandotra, Vandana, Archana Singhal and Punam Bedi. (2011). Layered Security Architecture for Threat Management using Multi-Agent System. ACM SIGSOFT Software Engineering Notes, 36(5), September 2011, USA: ACM Digital Library.

Gandotra, Vandana, Archana Singhal and Punam Bedi. (2011). MASPTA-O: Multi-Agent System Planning to Avoid Threats Optimally, Information Security Journal: A Global Perspective, 20(6): 290-310. Taylor and Francis.

Sharma, Richa, Hema Banati and Punam Bedi. (2011). Analyzing User Interaction to Design an Intelligent e-Learning Environment. IJEL - International Journal on E-Learning. 10 (4): 441–460.

Bansal, Roli, Priti Sehgal and Punam Bedi. (2011). Minutiae Extraction from Fingerprint Images - a Review, IJCSI International Journal of Computer Science Issues. 8(5): 74-85.

Goel, Samiksha, Arpita Sharma, Punam Bedi and V. K. Panchal. (2011). Decision Gap within Swarm in Natural Terrain Feature Identification, International Journal of Computer Science and Security (IJCSS), 1(3). CSC press.

Bedi, Punam and Pooja Vashisth. (2011). Interest Based Recommendations with Argumentation. Journal of Artificial Intelligence. 4(2): 119-142.

Bedi, Punam, Vandana Gandotra, Archana Singhal, Himanshi Narang and Sumit Sharma. (2011). An Optimal Approach for Avoiding Threats, European Journal of Scientific Research. 55(4):527-537.

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Gaur, Vibha Neeraj Kumar Sharma and Punam Bedi. (2011). A Dynamic Reinforcement Learning Strategy for Seller Agents in e-market, *International Journal on Recent Trends in Engineering & Technology*. 5(1): 25-31. ACEEE.

Thukral, Anjali, Punam Bedi and Hema Banati. (2011). Architecture to organize social semantic relevant web resources in a knowledgebase, *International Journal of e-Education, e-Business, e-Management and e-Learning (IJEEEE)*. 1(1): 45-51. Singapore: International Association of Computer Science and Information Technology Press (IACSIT).

Bedi Punam and Suruchi Chawla. (2011). High Scant Web Page Recommendation using Fuzzy Rough Set Attribute Reduction, J.F. Peters et al. (Eds.): *Transactions on Rough Sets XIV, LNCS 6600*: 18--36. Berlin Heidelberg: Springer-Verlag.

Bedi, Punam, A K Sinha, Sumit Agarwal, Ambrish Awasthi, Gaurav Prasad and Devinder Saini. (2010). Influence of Terrain on Modern Tactical Combat – A case study of Trust Based Recommender System. *Special Issue on Machine Learning & Pattern Recognition of Defence Science Journal*, 60(4): 405-411 (impact factor 0.500).

Bedi, Punam and Suruchi Chawla. (2010). Agent based Information Retrieval System using Information Scant. *Journal of Artificial Intelligence*. 3(4): 220-238.

Gupta, Bhavna, Harmeet Kaur and Punam Bedi. (2010). A reputation based service provider selection system for farmers, *Journal of Information Assurance and Security*. 5(2010):508-515.

Bansal, Roli, Priti Sehgal and Punam Bedi. (2010). Effective Morphological Extraction of True Fingerprint Minutiae based on the Hit or Miss Transform, *International Journal of Biometrics and Bioinformatics (IJBB)*. 4(1):1-16.

Bedi, Punam, Harmeet Kaur, Bhavna Gupta, Jyotsna Talreja and Mansi Sood. (2009). A Website Recommender System based on Analysis of User's Access Log. *Journal of Intelligent Systems, Special Issue on Recent Advances in Artificial Intelligence*. 18(4).

Bedi, Punam, Ravish Sharma and Harmeet Kaur. (2009). Recommender system based on collaborative behavior of ants. *Journal of Artificial Intelligence*. 2(2): 40-55.

Bedi, Punam and Vibha Gaur. (2008). Trust based prioritization of quality attributes. *The International Arab Journal of Information Technology*. 5(3):223-229 (impact factor 0.127).

Marwaha, Sudeep and Punam Bedi. (2007). Temporal extension to OWL ontologies. *International Journal of Information Technology*. 4(1):53-60.

Bedi, Punam and Vibha Gaur. (2007). Evaluating trust in agent-mediated e-commerce. *International Journal of Technology, Knowledge and Society*. 3(3): 65-74.

Bedi, Punam and Vibha Gaur. (2007). Establishing quality requirements of multi-agent projects. *Information Technology Journal*. 6(5):490-496.

Bedi, Punam and Suruchi Chawla. (2007). Improving information retrieval precision using Query log mining and information scent. *Information Technology Journal*. 6(4):584-588.

Bedi, Punam and Vibha Gaur. (2007). Trust based quantification of quality for multiagent systems. *Information Technology Journal*. 6(3):414-423.

Banati, Hema and Punam Bedi. (2006). Trust dimension to usability. *Journal of Technology, Knowledge and Society*. 2(4):75-82.

Bedi, Punam and Harmeet Kaur. (2006). Trust based personalized recommender system. *INFOCOMP Journal of Computer Science*. 5(1):19-26.

Bedi, Punam and Hema Banati. (2006). Trust aware usability. Special issue on Website Evaluations of *Journal of Information Technology and Tourism*. 8(3):215-226.

Banati, Hema, Punam Bedi and P S Grover. (2006). Evaluating web usability from the `user's perspective. *Journal of Computer Science*. 2(4):314-317.

Bedi, Punam and Hema Banati. (2006). Assessing user trust to improve web usability. *Journal of Computer Science*. 2(3):283-287.

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Bedi, Punam, K D Sharma and Saroj Kaushik. (1993). Time dimension to frame systems. *Journal of Information Science and Technology*. 2(3):212-228.

Research papers Published in Peer Reviewed Conferences

Punam Bedi, Richa, Sumit Kumar Agarwal and Veenu Bhasin. (2016). ELM Based Imputation-Boosted Proactive Recommender Systems. In proceedings ICACCI 2016 - International Conference on Advances in Computing, Communications and Informatics , Jaipur, India, Sept. 21-24, 2016: 80-85. USA: IEEE Xplore.

Anjali Gautam, Parila Chaudhary, Kunal Sindhwani and Punam Bedi. (2016). CBCARS: Content Boosted Context-Aware Recommendations Using Tensor Factorization, In proceedings ICACCI 2016 - International Conference on Advances in Computing, Communications and Informatics , Jaipur, India, Sept. 21-24, 2016: 86-92. USA: IEEE Xplore.

Anuradha Singhal, Punam Bedi. (2016). Local Binary Pattern Operator based Steganography in Wavelet Domain, In proceedings ICACCI 2016 - International Conference on Advances in Computing, Communications and Informatics , Jaipur, India, Sept. 21-24, 2016: 831-836. USA: IEEE Xplore.

Vinita Jindal, Vishwaraj Sharma and Punam Bedi. (2016). A preemptive Hybrid Ant Particle Optimization (HAPO-P) algorithm for Smart Transportation, In proceedings ICACCI 2016 - International Conference on Advances in Computing, Communications and Informatics , Jaipur, India, Sept. 21-24, 2016: 1362-1368.

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Richa and Punam Bedi. (2016). Parallel Context Aware Recommender System using GPU and JCUda, In proceedings ICACCI 2016 - International Conference on Advances in Computing, Communications and Informatics , Jaipur, India, Sept. 21-24, 2016: 1388-1394. USA: IEEE Xplore.

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Mehta, Shikha, Hema Banati, and Punam Bedi. (2009). BDI planning approach to distributed multiagent based semantic search engine. In proceedings DCAI'09 - International Symposium on Distributed Computing and Artificial Intelligence, The 10th International Work-Conference on Artificial Neural Networks (IWANN2009) (Biological Inspired Systems. Computational and Ambient Intelligence), June 10-12, 2009, Spain. 25–28. Berlin Heidelberg: Springer-Verlag.

Bansal, Roli, Priti Sehgal and Punam Bedi. (2008). A novel framework for enhancing images corrupted by impulse noise using type-II fuzzy sets. In proceedings FSKD'08 - IEEE International Conference on Fuzzy Systems and Knowledge Discovery, October 18-20, 2008, Jinan, China. 266-271. USA: IEEE Press

Chawla, Suruchi and Punam Bedi. (2008). Query expansion using information scent. In proceedings ITSIM '08 - International Symposium on Information technology, August 26-28, 2008, Kuala Lumpur, Malaysia. 1-8. USA: IEEE Press.

Chawla, Suruchi and Punam Bedi. (2008). Improving information retrieval precision by finding related queries with similar information need using information scent. In proceedings ICETET'08 – The 1st International Conference on Emerging Trends in Engineering and Technology, July16-18, 2008, Nagpur, 486-491. USA: IEEE computer society press.

Chawla, Suruchi and Punam Bedi. (2008). Finding hubs and authorities using information scent to improve the information retrieval precision. In proceedings ICAI'08 - The 2008 International Conference on Artificial Intelligence, WORLDCOMP'08, July 14-17, 2008, Las Vegas, USA: CSREA Press

Bedi, Punam, Saurabh Jain, Richa Gupta, Ravish Sharma and Archana Singhal. (2007). Towards self-organizing web sites. In proceedings ADCOM'07 - 15th International Conference on Advanced Computing & Communication, December 18-21, 2007, Guwahati, 283-288. USA: IEEE Computer Society Press.

Vats, Aakanksha and Punam Bedi. (2007). Load balancing on dynamic network using mobile process groups. In proceedings ADCOM'07-15th International Conference on Advanced Computing & Communication, December 18-21, 2007, Guwahati, 553–558. USA: IEEE Computer Society Press.

Marwaha, Sudeep, Mohit Gupta, Manisha Bansal and Punam Bedi. (2007). Semantic web enabled resource scheduler - An approach using temporal extensions to ontologies. In proceedings ICCIMA'07 - International Conference on Advances on Computational Intelligence and Multimedia Applications, December 13-15, 2007, Sivakasi, 103-109. USA: IEEE Computer Society Press.

Bedi, Punam, Neha Mehdiratta, Silky Dhand, Ravish Sharma and Archana Singhal. (2007). Avoiding traffic jam using ant colony optimization. In proceedings ICCIMA'07 - International Conference on Advances on Computational Intelligence and Multimedia Applications, December 13-15, 2007, Sivakasi, 61-67. USA: IEEE Computer Society Press.

Chawla, Suruchi and Punam Bedi. (2007). Personalized web search using information scent. In proceedings CISSE'07-International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering, December 3-12, 2007, University Bridgeport, 483-488 .Netherlands: Springer.

Sharma, Ravish, Maulein Singh, Ramneet Makkar, Harmeet Kaur and Punam Bedi. (2007). Ant recommender: Recommender system inspired by ant colony. In proceedings ACVIT'07 - International Conference on Advances in Computer Vision and Information Technology, November 28-30, 2007, Aurangabad.

Bedi, Punam and Vibha Gaur. (2007). Refining quality requirements in agent mediated e-commerce from user's trust. In proceedings ACVIT'07 - International Conference on Advances in Computer Vision and Information Technology, November 28-30, 2007, Aurangabad.

Thukral, Anjali, Richa Sharma, Hema Banati and Punam Bedi. (2007). Modeling roles in E-learning - MoRel. In proceedings ACVIT'07 - International Conference on Advances in Computer Vision and Information Technology, November 28-30, 2007, Aurangabad.

Bedi, Punam and Vibha Gaur. (2007). Optimal partner selection model for cooperation. In proceedings IICAI'07-3rd Indian International Conference on Artificial Intelligence, December 17 - 19, 2007, Pune, India. 1297-1307.

Bansal, Roli, Priti Sehgal and Punam Bedi. (2007). A simplified fuzzy filter for impulse noise removal using thresholding. In proceedings WCECS 2007 - World Congress on Engineering and Computer Science 2007, October 24-26, 2007, San Francisco, USA: The International Association of Engineers.

Bedi, Punam and Vibha Gaur. (2007). Quantification of quality for multi-agent system - A clustering approach. In proceedings CISTM'07 - 5th Annual Conference on Information Science, Technology and Management, July 16-18, 2007, Hyderabad, 72-85.

Bedi, Punam and Sudeep Marwaha. (2007). Versioning OWL ontologies using temporal tags. In proceedings CESSE'07 - The XXI. International Conference on Computer, Electrical, and Systems Science, and Engineering, May 25-27, 2007, Vienna, 332-337. USA: World Academy of Sciences.

Bedi, Punam and Vibha Gaur. (2007). Exploring the interdependencies among communication, knowledgeability and performance of multi-agent systems. In proceedings WCE'07 – World Congress on Engineering, vol 1, July 2-4, 2007, London, 47-552. USA: The International Association of Engineers.

Bedi, Punam and Vibha Gaur. (2007). Prioritizing quality specifications of multi-agent systems. In proceedings WCE'07 - the 2007 International Conference of Information Engineering, July 2-4, 2007, London, 541-546. USA: The International Association of Engineers.

Sharma R., M. Bansal, M. Gupta, A. Singhal and P. Bedi. (2007). Particle Swarm Optimization. In proceedings OPTIMA 2007 - the National Conference on Mathematical Modeling, Optimization and their Applications: 271-275. INDIA: Narosa publishing company.

Marwaha, Sudeep, Mohit Gupta, Manisha Bansal and Punam Bedi. (2007). Semantic Web Enabled Resource Scheduler: A Case Study for Scheduling Academic Events. In proceedings OPTIMA 2007 - the National Conference on Mathematical Modeling, Optimization and their Applications: 34-39. INDIA:

Narosa publishing company.

Bedi, Punam and Vibha Gaur. (2007). Evaluating trust in agent-mediated e-commerce, Paper Presented at the Third International Conference on Technology, Knowledge and Society, January 9-12, 2007, Cambridge University, UK.

Bedi, Punam, Harmeet Kaur and Sudeep Marwaha. (2007). Trust based recommender system for the semantic web. In proceedings IJCAI'07 - International Joint Conference on Artificial Intelligence, January 9-12, 2007, Hyderabad, 2677- 2682. USA: AAAI Press.

Bedi, Punam and Sudeep Marwaha. (2006). Multi agent system for farmers: an approach using temporal ontologies. In proceedings International Conference on Statistics and Informatics in Agriculture Research, December 27-30, 2006, New Delhi, India.

Bedi, Punam and Vibha Gaur. (2006). Multi dimension quality model of MAS. In proceedings SERP'06– International Conference on Software Engineering Research and Practice, June 26-29, 2006, USA. 130-136. USA: CSREA Press.

Bedi, Punam and Harmeet Kaur. (2005). Using fuzzy clustering to determine trust based recommendations. In proceedings IICAI'05 – Indian International Conference on Artificial Intelligence, December 20-22, 2005, Pune, 2120-2136.

Banati, Hema and Punam Bedi. (2005). Trust dimension to usability, Paper Presented at the Second International Conference on Technology, Knowledge and Society, December 12-15, 2005, Hyderabad, India.

Bedi, Punam, and Hema Banati. (2005). Prioritizing web usability attributes using intuitionistic fuzzy sets. In proceedings SERP'05 – International Conference on Software Engineering Research and Practice, June 27-30, 2005, Las Vegas, 570-576. USA: CSREA Press.

Bedi, Punam and Harmeet Kaur. (2005). Trust based recommender system. In proceedings ICAI'05 – International Conference on Artificial Intelligence, June 27-30, 2005, Las Vegas, 798-801. USA: CSREA Press.

Bedi, Punam and Sudeep Marwaha. (2005). Framework for ontology based expert systems: disease and pests identification in crops – A case study. In proceedings ICAI'05 - International Conference on Artificial Intelligence, June 27-30, 2005, Las Vegas, 256-259. USA: CSREA Press.

Harmeet Kaur and Punam Bedi. (2005). Using fuzzy clustering to determine agent reputation. In proceedings DMIN'05 – International Conference on Data Mining, June 20-23, 2005, Las Vegas, 79-85. USA: CSREA Press.

Banati, Hema and Punam Bedi. (2005). HISE - An algorithmic approach to evolve a usable website. In proceedings HCI'05 - International Conference on Human-Computer Interaction, June 20-23, 2005, Las Vegas, 17-23. USA: CSREA Press.

Bedi, Punam and Harmeet Kaur. (2005). Clustering recommendations to compute agent reputation. In proceedings Conference on Intelligent Computing: Theory and Application, March 28 - April 1, 2005,

Florida, 131-137. USA: SPIE.

Bedi Punam and Kamal K Goyal. (2005). Estimating Reliability of Multi Agent System. In proceedings International Conference on Reliability, Statistics and Related Fields (ICRSRF), Jan.7-9, 2005, Indian Institute of Management Kozhikode, Kerala, India.

Bedi, Punam and Harmeet Kaur. (2004). Modeling agent reputation in uncertain environment. In proceedings ICCS'04 - International Conference on Cognitive Science, December 16-18, 2004. Allahabad, 258-263.

Bedi, Punam and Sudeep Marwaha. (2004). Designing ontologies from traditional taxonomies. In proceedings ICCS'04 - International Conference on Cognitive Science, December 16-18, 2004, Allahabad, 324-329.

Bedi, Punam and Harmeet Kaur. (2004). Fuzzy quantification of trust. In proceedings ICCS'04 - International Conference on Cognitive Systems, December 14-15, 2004, New Delhi.

Bedi, Punam, Harmeet Kaur and Ankit Malhotra. (2002). Fuzzy dimension to databases. In proceedings 37th Annual Convention of Computer Society of India, October 29-31, 2002, Bangalore.

Bedi,Punam, K D Sharma and Saroj Kaushik. (1998). Multimedia Dimension to Frame Systems, 7th International Conference on Intelligent Systems, Accepted for Presentation and Publications in ICIS'98, July 1-3, 1998, Paris, France.

Bedi, Punam, K D Sharma and Saroj Kaushik. (1998). Distributed Frame Systems, International Conference on Computers and their Applications, Accepted for Publications in CATA'98, March 25-27, 1998, USA.

Bedi, Punam, K D Sharma and Saroj Kaushik. (1993). Triggers in frames. In proceedings 4th International Computing Congress, December 15-18, 1993, Hyderabad, 178-185. India: Tata McGraw-Hill.

Bedi, Punam, K.D. Sharma and Saroj Kaushik. (1991). A frame system shell (FS-shell). In proceedings 26th Annual Convention of Computer Society of India, September 29- October2, 1991, Delhi, 283-297. India: Tata McGraw-Hill.

Conference Organization/ Presentations

Organization of a Conference

Member, Technical Programme Committee (TPC), IEEE CICS 2018 Special Session on Computational Intelligence for Digital Data Hiding (CIDDH). The 2018 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2018), <http://ieeessci2018.org/cics.html>, 18 - 21 November, 2018, Bengaluru, India.

Member, Program Committee, 10th International Conference on Agents and Artificial Intelligence (ICAART 2018), Funchal, Madeira, Portugal January 16-18, 2018.

Chair, Publicity Committee, 5th International Conference on Big Data Analytics (BDA 2017), December 12-15, 2017, Hyderabad, India.

Member, Technical Program Committee, Symposium on Machine Learning and Metaheuristics Techniques and Applications for Dependable Distributed Systems (MADS'17), November 6-10, 2017, Orlando, Florida, USA.

General Chair, Fifth International Symposium on Women in Computing and Informatics (WCI 2017) co-affiliated with Sixth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2017), September 13-16, 2017. Manipal University, Karnataka, India.

Member, Program Committee, Sixth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2017), September 13-16, 2017. Manipal University, Karnataka, India.

Special Session Co-Chair, Sixth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2017), September 13-16, 2017. Manipal University, Karnataka, India.

Member, Technical Program Committee, International Conference on Deep Learning Technologies (ICDLT 2017)), June 2-4, 2017, Chengdu, China.

Member, Program Committee, 9th International Conference on Agents and Artificial Intelligence (ICAART 2017), Porto, Portugal February 24-26, 2017.

Member, National Advisory Committee, International Conference on Soft Computing: Theories and Applications December 28-30, 2016, Amity University Rajasthan, Jaipur, India.

Program Co-Chair, Fourth International Symposium on Women in Computing and Informatics (WCI 2016), September 21-24, 2016, LNMIIT, Jaipur, India.

Award Committee Co-Chair, Fifth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2016), September 21-24, 2016. LNMIIT, Jaipur, India.

Program Co-Chair, Third International Symposium on Women in Computing and Informatics (WCI 2015), 10 - 13 August 2015, Kochi, Kerala, India.

Publication Chair, Third International Conference on Advances in Computing, Communications and Informatics (ICACCI-2014). GCET, Greater Noida, India, September 24-27, 2014.

Workshop Chair, ISDA 2012 - 12th International Conference on Intelligent System Design and Applications, November 27-29, 2012, Kochi, India.

Workshops and Special Sessions Chair, HIS 2012 – 12th International Conference on Hybrid Intelligent Systems, December 04-07, 2012, Pune, India

Tutorial Chair, The International Conference on Security in Computer Networks and Distributed Systems (SNDS-2012), Indian Institute of Information Technology and Management-Kerala (IIITM-K), Trivandrum, India, October 11-12, 2012.

Organizing Chair, International Conference on Information Systems Security (ICISS-2007), University of Delhi, Dec.16-20, 2007.

Coordinator, Workshop on Computational NeuroScience (CNS 2007), organized at Department of Computer Science in collaboration with National Brain Research Centre (NBRC), Manesar, and International Brain Research Organization (IBRO), Dec. 24-31, 2007.

Member, Organizing Committee, National Conference on Mathematical Modeling, Optimization and Their Applications, April 28 - 29, 2007.

Member, Organizing Committee, 13th International Conference on Management of Data (COMAD 2006), Indian Institute of Technology (IIT), Delhi, India, December 14-16, 2006.

Member, Organizing Committee, 10th International Database Engineering and Applications Symposium, Delhi, India, Dec 11-14, 2006.

Member, Organizing Committee, Workshop on Content Creation for e-Learning, South Campus, University of Delhi, August 25-27, 2006.

Member, Organizing Committee, VLDB Delhi Summer School on Frontiers in Database Technology, IIT Delhi, India, June 1-4, 2004.

Member, Organizing Committee, 2nd International Conference on Quality, Reliability and Information Technology, New Delhi, India, 2003

Participation as Paper/Poster Presenter

Bedi, Punam, Pooja Vashisth, Purnima Khurana and Preeti. (2013). Modeling User Preferences in a Hybrid Recommender System using Type-2 Fuzzy Sets. In proceedings FUZZ-IEEE 2013 - The 2013 IEEE International Conference on Fuzzy Systems, July 7 – 10, 2013, Hyderabad, India: 1-8. USA: IEEE Xplore.

Bansal, Roli, Veenu Bhasin, Priti Sehgal and Punam Bedi. (2013). Multi-Agent System for Intelligent Watermarking of Fingerprint Images. FUZZ-IEEE 2013 - The 2013 IEEE International Conference on Fuzzy Systems, July 7 – 10, 2013, Hyderabad, India: 1-8. USA: IEEE Xplore.

Sharma, Neeraj Kumar, Vibha Gaur and Punam Bedi. (2013). Distributed Multi-agent Reputation Framework for Interactions in e-market. FUZZ-IEEE 2013 - The 2013 IEEE International Conference on Fuzzy Systems, July 7 – 10, 2013, Hyderabad, India: 1-8. USA: IEEE Xplore.

Bedi, Punam and Vibha Gaur. 2007. Evaluating trust in agent-mediated e-commerce, Paper Presented at the Third International Conference on Technology, Knowledge and Society, January 9-12, 2007, Cambridge University, UK.

Bedi, Punam and Kamal K. Goyal. 2005. Estimating reliability of multi agent system, Paper Presented at the International Conference on Reliability, Statistics and Related Fields (ICRSRF), January 7-9, 2005, Kerala, India.

Bedi, Punam and Sudeep Marwaha. 2006. Multi agent system for farmers: an approach using temporal ontologies. Paper Presented at the International Conference on Statistics and Informatics in Agriculture Research, December 27-30, 2006, New Delhi, India.

Banati, Hema and Punam Bedi. 2005. Trust dimension to usability, Paper Presented at the Second International Conference on Technology, Knowledge and Society, December 12-15, 2005, Hyderabad, India.

Research Projects (Major Grants/Research Collaboration)

Influence of Terrains on Modern Tactical Combats – A Recommender System Approach

Position: Principal Investigator
Funding Agency: DTRL, DRDO, New Delhi
Period: Dec2006- June2009
Research Grant: Rs.9.89Lac
Status: Completed

Multi-agent systems

Position: Principal Investigator
Funding Agency: University of Delhi
Period: 2007- 2008
Research Grant: Rs.1.0Lac
Status: Completed

Multi-agent systems design methodologies

Position: Principal Investigator
Funding Agency: University of Delhi
Period: 2008- 2009
Research Grant: Rs.1.5Lac
Status: Completed

Trust in multi-agent systems

Position: Principal Investigator
Funding Agency: University of Delhi
Period: 2009- 2010
Research Grant: Rs.1.0Lac
Status: Completed

Using Ant based trust to compute recommendations

Position: Principal Investigator
Funding Agency: University of Delhi
Period: 2010- 2011
Research Grant: Rs.1.0Lac
Status: Completed

Information hiding (Steganography) and Steganalysis in Images

Position: Principal Investigator
Funding Agency: University of Delhi
Period: 2011- 2012
Research Grant: Rs.1.2Lac
Status: Completed

Recommender system for trustworthy personalized eLearning

Position: Principal Investigator
Funding Agency: University of Delhi
Period: 2012- 2013
Research Grant: Rs.1.5Lac
Status: Completed

Trustworthy Pro-active Recommender System

Position: Principal Investigator
Funding Agency: University Grants Commission
Period: 2013- 2016
Research Grant: Rs.13,38,800/-
Status: Completed

Steganalysis of colored JPEG Images

Position: Principal Investigator
Funding Agency: University of Delhi
Period: 2013- 2014
Research Grant: Rs.2.5Lac
Status: Completed

Computationally Intelligent Image Steganalysis

Position: Principal Investigator
Funding Agency: University of Delhi
Period: 2014- 2015
Research Grant: Rs.1.2Lac
Status: Completed

Soft Computing Approach to Multi-Criteria Optimization Models for Component Selection in Designing Fault Tolerant Software Systems

Position: Joint Principal Investigator
along with Dr. P.C. Jha (O.R. Dept., DU)
Funding Agency: DST (DU-DST PURSE grant)
Period: 2014- 2018
Research Grant: Rs.6.12Lac
Status: Ongoing

Feature Selection for image Steganalysis

- Position: Principal Investigator
- Funding Agency: University of Delhi
- Period: 2015- 2016
- Research Grant: Rs.1.5Lac
- Status: Completed

Mentor for Innovation Projects, University of Delhi (2015-2016)

1. Groups based Co-ordination for information exchange in Ad-hoc Networks

- Principal Investigators:
 - Dr. Aakanksha, Department of Computer Science, SRCASW, DU
 - Ms. Tina Sachdeva, Department of Computer Science, SRCASW, DU
 - Ms. Neha Garg, Department of Instrumentation, SRCASW, DU

2. Study and Design of Framework for Cloud Implementation in Large University/ Higher Education

- Principal Investigators:
 - Mr. Bhavya Deep, Department of Computer Science, BCAS, DU
 - Mr. Vikas Tyagi, Department of Physics, BCAS, DU
 - Mr. Parveen, Department of Computer Science, BCAS, DU

Awards & Distinctions

Obtained Rank 1 in M.Sc.(Mathematics), IIT Delhi.

Obtained GATE scholarship 1984 - 1986.

Obtained Rank 2 in M.Tech. (Computer Science), IIT Delhi.

Governor Chancellor's nominee on Selection Committee(s) of Maharshi Dayanand University, Rohtak for teaching posts in Computer Science (2008-2010).

Included in Marquis Who's Who in the World in 29th Edition of 2012.

Included in Marquis Who's Who in Science and Engineering 2016-2017 (12th Edition).

Expert Member, Research Council, Defense Terrain Research Laboratory, DRDO, Ministry of Defense, Government of India (2017).

Selected for inclusion in Marquis Who's Who in the World 2018.

Selected for the 2018 Albert Nelson Marquis Lifetime Achievement Award.

Association With Professional Bodies

Editing

Associate Editor, International Journal on Trust Management in Computing and Communications (IJTMCC), Inder Science, UK.

Member, Editorial Board, International Journal of Computer Science: Theory, Technology and Applications (IJCS).

Member, Editorial Board, International Journal of Data Modelling and Knowledge Management, Bhopal, India.

Member, Editorial Board, Journal of the Indian Society of Agricultural Statistics (JISAS), ISSN 0019-6363.

Member, Editorial Board, Journal of Knowledge, Learning and Ontology Engineering (JKOLE), Artificial Intelligence Association of India.

Member, Editorial Board, Indian Science Abstracts 2008-2010.

Associate Editor, International Journal of Technology, *Knowledge and Society*, Vol. 3, 2007.

Associate Editor, International Journal of Technology, Knowledge and Society, Vol. 2, 2006.

Member, Editorial Board, Scientific Journals International, USA.

Reviewing

Reviewer, 2017 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2017), Naples, Italy, July 9-12, 2017.

Reviewer, 2017 IEEE International Conference on Systems, Man, and Cybernetics, October 5–8, 2017, Banff Center, Banff, Canada.

Reviewer, IEEE International Conference on Systems, Man, and Cybernetics (SMC 2016), October 09-12, 2016, Budapest, Hungary.

Member, Technical Program Committee, International Conference on Contemporary Computing and Informatics (IC3I), December 14-17, 2016, Amity University, Noida, India.

Member, Program Committee, Fifth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2016), September 21-24, 2016. LNMIIT, Jaipur, India.

Reviewer, IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2016), July 25-29, 2016, Vancouver, Canada.

Member, Program Committee, Fourth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015), August 10-13, 2015, Kochi, Kerala, India.

Member, International Program Committee, International Conference on Knowledge Engineering and Ontology Development - KEOD 2015, November, 12-14, 2015, Lisbon, Portugal.

Member, Program Committee, The 5th International Conference CONFLUENCE 2014 The Next Generation Information Technology Summit, September 25-26, 2014, Amity University Uttar Pradesh, India.

Member, Technical Program Committee, International Conference on Contemporary Computing and Informatics (IC3I), Sri Jaya Chamarajendra College of Engineering (SJCE), November 27-29, 2014, Mysore, India.

Member, Technical Program Committee, First International Conference on Networks & Soft Computing, (ICNSC-- 2014), Vignan's Foundation for Science, Technology & Research, August 19-20 2014, Guntur, Andhra Pradesh.

Member, Technical Program Committee, International Conference on "Computational Intelligence & Communication Technology (CICT-2015), ABES Engineering College, Feb. 13-14, 2015, Ghaziabad, India.

Member, International Program Committee, World Congress on Information and Communication Technologies (WICT 2014), December 8-11, 2014, Malacca, Malaysia.

Member, International Program Committee, The International Conference on Soft Computing and Pattern Recognition (SoCPaR), August 11-14, 2014, Tunis, Tunisia.

Member, Program Committee, Fifth World Congress on Nature and Biologically Inspired Computing (NaBIC2014), July 30 - August 01, 2014, Porto, Portugal.

Member, Program Committee, The 6th International Conference on Computational Aspects of Social Networks (CASoN), July 30 - August 01, 2014, Porto, Portugal.

Member, Program Committee, 4th International Conference on Advances in Computing, Communication and Control (ICAC3'15), January 23-24, 2015, Mumbai, India.

Member, Program Committee, International Conference on Agents and Artificial Intelligence (ICAART 2015), January 10-12, 2015, Lisbon, Portugal.

Member, Program Committee, International Conference On Advances In Electronics, Computers And Communications (ICAECC-14), October 10-11,2014, Bengaluru, INDIA.

Member, International Program Committee, "International Conference on Knowledge Engineering and Ontology Development" - KEOD 2014, October, 21-24, 2014, Rome Italy.

Member, Program Committee, 2nd International Conference on Advanced Computing, Networking and Informatics (ICACNI 2014), June 24-26, 2014, Kolkata, India.

Member, Program Committee, The 5th FTRA International Conference on Creative Converged IT (CCIT 2014), April 9-12, 2014, Daejeon, Korea.

Member, Technical Program Committee, 3rd International Conference on Intelligent Machines

(ICIM'2014), May 1-4, 2014, Tunis, Tunisia.

Member, International Program Committee, International Conference on Pervasive and Embedded Computing and Communication Systems - PECCS 2014, January 7 – 9, Lisbon, Portugal.

Member, Technical Program Committee, The 2nd International Conference on Information Systems & Computer Networks (ISCON 2014), March 1-2, 2014, GLA University, Mathura, India.

Member, Program Committee, International Conference on Agents and Artificial Intelligence (ICAART 2014), ESEO, March 6 – 8, 2014, Angers, Loire Valley, France.

Member, Program Committee, The 4th International Conference CONFLUENCE 2013 The Next Generation Information Technology Summit, September 26-27, 2013, Amity University Uttar Pradesh, India.

Member, Program Committee, The International Conference on Machine Intelligence Research and Advancement, ICMIRA-2013, December 21-23, 2012, Katra, Jammu, India.

Member, Technical Program Committee, track “Computing” of the International Conference on Mathematics and Computing (ICMC 2013), December 26-29, 2013, Haldia, India.

Member, Program Committee, DMSI 2013 - The 2013 International Conference on Advances in Data Mining and Security Informatics, December 18-20, 2013, Tumkur (near Bangalore), India.

Member, Program Committee, IICAI 2013 - 6th Indian International Conference on Artificial Intelligence, December 18-20, 2013, Tumkur (near Bangalore), India.

Member, Program Committee, The International Conference on Machine Intelligence Research and Advancement, MIRA-2013, December 21-23, 2012, Katra, Jammu, India.

Member, Technical Committee, Second International Conference on Advances in Computing, Communications and Informatics (ICACCI-2013). August 22-25, 2013, Mysore, India.

Member, Program Committee, The International Conference on Communication Systems and Network Technologies (CSNT-2013), April 5-8, 2013, Gwalior, India.

Member, Program Committee, International Conference on Advances in Computing, Communication and Control (ICAC3'13), January 18 – 19, 2013, Mumbai, India.

Technical Committee Member and Track Chair, ISSET 2012 - The International Symposium on standards in Engineering and Technology to be held at Delhi Technological University from 4-6 October 2012.

Member, Technical Program Committee, special session on “Nature-inspired Algorithms for Service-Oriented Architectures and Cloud computing” at the Fourth World Congress on Nature and Biologically Inspired Computing (NaBIC2012) to be held at Mexico City, Mexico during November 05-09, 2012.

Member, Technical Program Committee, WTA 2012 - 8th International Symposium on Wireless sensor network Technologies and Applications for Smart Space, Jeju, November 22-25, 2012,

Reviewer, Interactive Learning Environments, Taylor & Francis Journal, 2012.

Reviewer, Human-centric Computing and Information Sciences, SpringerOpen Journal, 2012.

Member, Technical Program Committee, 2012 FTRA International Conference on Advanced IT, engineering and Management), July 10-12, 2012, Jeju, Korea.

Member, Technical Committee on Soft Computing of IEEE Systems, Man and Cybernetics Society.

Member, Technical Committee on Computational Collective Intelligence of IEEE Systems, Man and Cybernetics Society.

Member, Technical Committee on Computational Intelligence of IEEE Systems, Man and Cybernetics Society.

Member, Technical Program Committee, Seventh International Conference on “Bio-Inspired Computing: Theories and Application, 2012 (BIC-TA 2012)” is to be held at ABV-Indian Institute of Information Technology and Management Gwalior during December 14 - 16, 2012.

Member, Program Committee, National Conference on Computing For National Development (INDIAcom), 2012.

Member, Advisory Committee, International Conference on Information, Communication and Embedded Systems- (ICICES2012), S.A.Engineering College, Chennai, Tamilnadu, Feb. 2012.

Reviewer, Data and Knowledge Engineering Journal (DKE), elsevier.

Member, International Program Committee, World Congress on Information and Communication Technologies (WICT 2011), Mumbai, India, December 11-14, 2011.

Reviewer, International Journal of Semantic Web and Information Systems (IJSWIS).

Member, Program Committee, The tenth International Conference on Machine Learning and Applications (ICMLA'11), Honolulu Hawaii, USA, December 18-21, 2011.

Member, Program Committee, Indian International Conference on Artificial Intelligence, (IICAI 2011), Tumkur (near Bangalore), India, December 14-16, 2011.

Member, National Advisory Committee, International Conference on Information, Communication and Embedded Systems (ICICES) 2011, S.A. ENGG. COLLEGE, Chennai, India. Feb. 23-24, 2011.

Member, National Technical Committee, International Conference on Computer, Communication and Electrical Technology (ICCCET) 2011, National College of Engineering, Maruthakulam, Tirunelveli, Tamilnadu, India. March 18-19, 2011.

Member, International Programme Committee, The first International Conference on Advances in Computing and Communications (ACC-2011), Rajagiri School of Engineering and Technology (RSET), Kochi, Kerala, India, July 22-24, 2011.

Reviewer, Software: Practice and Experience, Wiley.

Reviewer, Neurocomputing, Elsevier.

Reviewer, The ninth International Conference on Machine Learning and Applications (ICMLA'10), Washington DC, USA, December 12-14, 2010.

Member, Technical Committee, International Conference on Methods and Models in Computing (ICM2C-2010), Jawaharlal Nehru University, Delhi, India, 2010.

Member, Program Committee, National Conference on Computing For National Development (INDIAcom), 2010.

Member, Technical Committee, International Conference on Methods and Models in Computing (ICM2CS-2009), Jawaharlal Nehru University, Delhi, India, 2009.

Member, Program Committee, Indian International Conference on Artificial Intelligence, (IICAI 2009), Tumkur, December 16-18, 2009.

Member, Program Committee, National Conference on Computing For National Development (INDIAcom), 2009.

Member, Program Committee, International Conference on Agents and Artificial Intelligence (ICAART 2009), Porto, Portugal, January 19 – 21, 2009.

Member, Technical Committee, National Conference on Methods and Models in Computing (NCM2C-2008), Jawaharlal Nehru University, Delhi, India, 2008.

Member, Technical Program Committee, 7th International Conference on Advanced Language Processing and Web Information Technology (ALPIT 2008), Dalian, China, July 23 – 25, 2008.

Member, Main Track Program Committee, The 7th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2008), Estoril, Portugal, May 12-16, 2008.

Member, Program Committee, National Conference on Computing For National Development (INDIAcom), 2008.

Member, Technical Committee, National Conference on Methods and Models in Computing (NCM2C-

2007), Jawaharlal Nehru University, Delhi, India, Dec 13-14, 2007.

Member, Program Committee, 11th International Database Engineering and Applications Symposium (IDEAS 2007), Banff, Canada, Sept. 2007.

Member, Technical Program Committee, 6th International Conference on Advanced Language Processing and Web Information Technology (ALPIT 2007), Huayang Plaza Hotel, Luoyang, China, Aug 22-24, 2007.

Member, Program Committee, National Conference on Computing For National Development (INDIAcom), Feb. 23–24, 2007.

Member, Technical Committee, National Conference on Methods and Models in Computing (NCM2C-2006), Jawaharlal Nehru University, Delhi, India, Dec 18-19, 2006.

Member, Program Committee, 10th International Database Engineering and Applications Symposium (IDEAS 2006), Delhi, India, Dec 11-14, 2006.

Member, Program Committee, ICAI'05 – The 2005 International Conference on Artificial Intelligence, Las Vegas, Nevada, USA, 2005.

Member, Program Committee, SERP'05 – The 2005 International Conference on Software Engineering Research and Practice, Las Vegas, Nevada, USA, 2005.

Member, Advisory Committee for Ph.D. Students, Awarded

Vandana Gandotra (Supervisor: Dr. Archana Singhal)

Shikha Mehta (Supervisor: Dr. Hema Banati)

Monika Bajaj (Supervisor: Dr. Hema Banati)

Priti Marwaha (Supervisor: Dr. Hema Banati)

Anuja Soni (Supervisor: Dr. Vibha Gaur)

Neeraj Kumar Sharma (Supervisor: Dr. Vibha Gaur)

Harita Mehta (Supervisor: Dr. V. S. Dixit)

Shikha Agarwal nee Gupta (Supervisor: Dr. Archana Singhal)

Samiksha Goel (Supervisor: Dr. Arpita Sharma)

Charu Aggarwal (Supervisor: Dr. Arpita Sharma)

Shweta Kundra (Supervisor: Dr. V. S. Dixit)

K. K. Chaturvedi (Supervisor: Dr. V. B. Singh)

Shailly Chawla (Supervisor: Dr. Sangeeta Srivastava)

Meera Sharma (Supervisor; Dr. V. B. Singh)

Mr. Abhishek (Supervisors: Dr. S.K. Muttoo, Dr. S. K. Pal)

Member, Advisory Committee for Ph.D. Students, under progress

Mr. Rajan Gupta (Supervisors: Dr. S.K. Muttoo, Dr. S. K. Pal)

Ms. Nidhi Arora (Supervisor: Dr. Hema Banati)

Mr. Indranath Chatterjee (Supervisor ; Dr. Naveen Kumar)

Ms. Sonia (Supervisor ; Dr. Naveen Kumar)

Ms. Himani(Supervisor ; Dr. Naveen Kumar)

Ms. Tripti Agarwal (Supervisor: Dr. Archana Singhal)

Ms. Shikha (Supervisors: Dr. S.K. Muttoo)

Mr. Ravi (Supervisors: Dr. S.K. Muttoo)

Ms. Akanksha Bansal nee Chopra (Supervisor: Dr. V. S. Dixit)

Mr. Anjani Kumar Verma (Supervisor: Dr. V. S. Dixit)

Ms. Prerna Singh (Supervisor: Dr. Priti Sehgal)

Committees and Boards

Nodal Officer (GeM) for University of Delhi (Oct. 2017 - April 16th, 2018).

Nodal Officer (e-procurement) for University of Delhi (Oct. 2017 - April 16th, 2018).

Transparency Officer and Nodal Officer for RTI request & Appeal Management Information Systems (RTI-MIS) of the University of Delhi (13th Dec., 2017 - April 16th, 2018).

Member Internal Complaints Committee, University of Delhi, (2017-2020).

Member, Governing Body, Lady Shri Ram College for Women (2017-2019).

Member, Standing Committee, Non Collegiate Women Education Board (2009 – 2017).

Member, Academic Council, University of Delhi (2005-2008).

Member (Coordinator), Website Committee, University of Delhi (June 2009- July 2010).

Member, Committee for implementing Student Life Cycle Management, University of Delhi (2009-2012).

Member, Project Monitoring Committee for implementing Student Life Cycle Management, University of Delhi (2010).

Governor Chancellor's nominee on Selection Committee(s) of Maharshi Dayanand University, Rohtak for teaching posts in Computer Science (2008-2010).

Member, Governing Body, Delhi University Library System (2008 – 2010).

Member, Departmental Research Committee, Department of Computer Science, University of Delhi.

Member, Committee of Post-Graduate and Honours Courses, Department of Computer Science, University of Delhi.

Member, Committee of Under-Graduate Courses, Department of Computer Science, University of Delhi.

Member, Selection Committee for JRF, UGC South Campus, University of Delhi (2008).

Member, Standing Committee (New Courses), University of Delhi (2007).

Member, Steering Committee for automation of Examination Branch, University of Delhi (2007).

Member, Task force for formulating to interact with the Confederation of Indian Industry (CII) for formulating Vocational Courses, University of Delhi (2007).

Member, Board of Studies, Department of Computer Science, Jamia Millia Islamia(2006 – 2010)

Member, Committee of Courses, Department of Computer Science, University of Rajasthan(2006 – 2010).

Co-Chairman, Working Group on Computer Science, NSDL Project, NISCAIR, India (2006).

Member, Selection Committees for various colleges of University of Delhi.

Member, Committee for promotion under CAS for various colleges of University of Delhi.

Member, Selection Committee for Scientist B, DRDO

Member, Committee for promotion under CAS for DRDO.

Member, Selection Committee, Baba Gulam Shah Badshah University, Jammu (2006).

Member, Southern Region Minor Research Project Scrutiny Committee, UGC (2006).

Member, Selection Committee for selection of Scholars for Post-doctoral Fellowship and research Scholarships for Scholars and Researchers, Govt. of NCT of Delhi, Department of Information Technology, Delhi Secretariat, New Delhi (2006).

Expert, DPC under CAS, National Centre for Agricultural Economics and Policy Research, New Delhi (2006).

Member, Expert Committee for Design of MCA (revised) 5th semester elective courses, IGNOU (2006).

Member, Expert Committee, Distance Education Council, for evaluation of BCA programme &Self Instructional Study Material of JRN Rajasthan Vidyapeeth (Deemed) University, Udaipur, Rajasthan (2006).

Member, Expert Committee, Distance Education Council, for evaluation of PGDCA and M.Sc. Computer Science programme &Self Instructional Study Material of JRN Rajasthan Vidyapeeth (Deemed) University, Udaipur, Rajasthan (2006).

Memberships

Senior Member, Institute of Electrical and Electronics Engineers (IEEE).

Member, Computer Society, IEEE

Senior Member, Association of Computing Machinery (ACM).

Member, Association for Advancement of Artificial Intelligence (AAAI) (formerly known as American Association of Artificial Intelligence).

Life Member, Computer Society of India.

Member, World Academy of Science, Engineering and Technology.

Office Bearer

Co-Chairman, Working Group on Computer Science, NSDL Project, NISCAIR, India (2006).

Other Activities

M.Sc.(Computer Science) Projects Completed

Aggarwal, Aviral, Hashtag Recommendation, Minor Project, M.Sc. Semester III, 2017-2018.

Mathur, Amol, Ningthoujam Padam Singh, Movie Rating Application using Public Opinion from Twitter, Minor Project, M.Sc. Semester III, 2017-2018.

Gupta, Suyash, Himanshu Shukla, Attendance Management System, Minor Project, M.Sc. Semester III, 2017-2018.

Bhatia, Deepika, Saumya Bansal, Handling Sparsity in Recommender Systems, Major Project, M.Sc.

Semester IV, 2016-2017.

Pandey, Aradhana, Garima Jain, Automated Planning for real time strategic games, Major Project, M.Sc. Semester IV, 2016-2017.

Agarwal, Aditi, Pooja Satija, Learning for real time strategic games, Major Project, M.Sc. Semester IV, 2016-2017.

Bhatia, Deepika, Saumya Bansal, Recommender System using Matrix Factorization, Minor Project, M.Sc. Semester III, 2016-2017.

Pandey, Aradhana, Garima Jain, Survey of real time strategic games for automated planning, Minor Project, M.Sc. Semester III, 2016-2017.

Agarwal, Aditi, Pooja Satija, Survey Of Real Time Strategic Games For Development Of Bot, Minor Project, M.Sc. Semester III, 2016-2017.

Yadav, Tarun, DWT based Image Steganography, Major Project, M.Sc. Semester IV, 2015-2016.

Chaudhary, Parila, Kunal Sindhwani, Matrix Factorization for Recommender Systems, Major Project, M.Sc. Semester IV, 2015-2016.

Yadav, Tarun, Image Steganalysis, Minor Project, M.Sc. Semester III, 2015-2016.

Chaudhary, Parila, Kunal Sindhwani, Recommender Systems, Minor Project, M.Sc. Semester III, 2015-2016.

Dhankani, Heena, Ruchika Garg, Optimization of traffic flow in VANETs, Major Project, M.Sc. Semester IV, 2014-2015.

Dhingra, Radhika, Tulika, Generating Recommendations for Big Data, Major Project, M.Sc. Semester IV, 2014-2015.

Singh, Neha, Charu Aggarwal, Feature Selection for Image Steganalysis, Major Project, M.Sc. Semester IV, 2014-2015.

Goel, Deepika, Muskan Dhanda, Generating Recommendations for Twitter Users, Major Project, M.Sc. Semester IV, 2014-2015.

Nigam, Divya, Shivangi Rastogi, Context Aware Recommender System, Major Project, M.Sc. Semester IV, 2014-2015.

Dhankani, Heena, Ruchika Garg, Adaptive Traffic signal for VANETs, Minor Project, M.Sc. Semester III, 2014-2015.

Dhingra, Radhika, Tulika, Generating Recommendations for Big Data, Minor Project, M.Sc. Semester III, 2014-2015.

Singh, Neha, Charu Aggarwal, Image Steganalysis, Minor Project, M.Sc. Semester III, 2014-2015.

Goel, Deepika, Muskan Dhandra, Handling Cold Start Problem in Recommender Systems using Social Ties, Minor Project, M.Sc. Semester III, 2014-2015.

Nigam, Divya, Shivangi Rastogi, Context Aware Recommender System, Minor Project, M.Sc. Semester III, 2014-2015.

Goel, Aakarshi, Sukanya Gupta, Steganalysis of Colored Images, Major Project, M.Sc. Semester IV, 2013-2014.

Mittal, Natasha, Trisha Chatterjee, Feature Selection for Steganalysis, Major Project, M.Sc. Semester IV, 2013-2014.

Joshi, Harshita, Samarth Sharma, Pro-active Recommender System, Major Project, M.Sc. Semester IV, 2013-2014.

Gupta, Anjali, Tushar Agarwal, Pro-active Recommender System, Major Project, M.Sc. Semester IV, 2013-2014.

Jain, Ena, Gunjan Gupta, Semantic Expansion of Ontology based User Profiling, Major Project, M.Sc. Semester IV, 2013-2014.

Goel, Aakarshi, Sukanya Gupta, Steganalysis of Colored Images, Minor Project, M.Sc. Semester III, 2013-2014.

Mittal, Natasha, Trisha Chatterjee, Feature Selection for Steganalysis, Minor Project, M.Sc. Semester III, 2013-2014.

Joshi, Harshita, Samarth Sharma, Pro-active Recommender System, Minor Project, M.Sc. Semester III, 2013-2014.

Gupta, Anjali, Tushar Agarwal, Pro-active Recommender System, Minor Project, M.Sc. Semester III, 2013-2014.

Jain, Ena, Gunjan Gupta, Semantic Expansion of Ontology based User Profiling, Minor Project, M.Sc. Semester III, 2013-2014.

Gautam Pahuja, Swati Parmar, Usability and Aesthetics in USERS (University Student Examination Result System), Major Project, M.Sc. Semester IV, 2012-2013.

Vikrant Ghai, Bhavya Dhingra, Security Management for USERS (University Student Examination Result System), Major Project, M.Sc. Semester IV, 2012-2013.

Deepika Kamboj, Sunaina Kalucha, Database Design for USERS (University Student Examination Result

System), Major Project, M.Sc. Semester IV, 2012-2013.

Sakshi, Archi, Steganalysis of JPEG Images, Major Project, M.Sc. Semester IV, 2012-2013.

Preeti, Purnima Khurana, Argumentation based Recommender System, Major Project, M.Sc. Semester IV, 2012-2013.

Gautam Pahuja, Swati Parmar, Usability and Aesthetics in USERS (University Student Examination Result System), Minor Project, M.Sc. Semester III, 2012-2013.

Vikrant Ghai, Bhavya Dhingra, Security Management for USERS (University Student Examination Result System), Minor Project, M.Sc. Semester III, 2012-2013.

Deepika Kamboj, Sunaina Kalucha, Database Design for USERS (University Student Examination Result System), Minor Project, M.Sc. Semester III, 2012-2013.

Sakshi, Archi, Steganalysis of Images, Minor Project, M.Sc. Semester III, 2012-2013.

Preeti, Purnima Khurana, Argumentation based Recommender System, Minor Project, M.Sc. Semester III, 2012-2013.

Sumit Sharma, Himanshi Narang, Secure Software Engineering, Major Project, M.Sc. Semester IV, 2011-2012.

Jasmeet Singh, Building Maps using Robots, Major Project, M.Sc. Semester IV, 2011-2012.

Deepak, Bipin, Argumentation in Recommender Systems, Major Project, M.Sc. Semester IV, 2011-2012.

Sneha, Manisha, Steganalysis in Images, Minor Project, Major Project, M.Sc. Semester IV, 2011-2012.

Shikha Sharma, Pooja Gupta, MASTER: Multi Agent System Technology for analyzing Examination Results, Major Project, M.Sc. Semester IV, 2011-2012.

Sumit Sharma, Himanshi Narang, Secure Software Engineering, Minor Project, M.Sc. Semester III, 2011-2012.

Jasmeet Singh, Multi-Robot System, Minor Project, M.Sc. Semester III, 2011-2012.

Deepak, Bipin, Argumentation in Recommender Systems, Minor Project, M.Sc. Semester III, 2011-2012.

Sneha, Manisha, Steganalysis in Images, Minor Project, M.Sc. Semester III, 2011-2012.

Shikha Sharma, Pooja Gupta, Agent Communication, Minor Project, M.Sc. Semester III, 2011-2012.

Abhishek Behl, Varun Mendiratta, Focussed Crawler, Major Project, M.Sc. Semester IV, 2010-2011.

Prachi Nagpal, Sumedha Upadhyaya, Adding semantics to web search, Major Project, M.Sc. Semester IV,

2010-2011.

Karima, Tejinder Kaur, Communication in Robots, Major Project, M.Sc. Semester IV, 2010-2011.

Anjani, Geetanjali Shivas, Steganalysis, Major Project, M.Sc. Semester IV, 2010-2011.

Abhishek Behl, Varun Mendiratta, Developing a Crawler, Minor Project, M.Sc. Semester III, 2010-2011.

Prachi Nagpal, Sumedha Upadhyaya, Exploring Functionality of a Search Engine, Minor Project, M.Sc. Semester III, 2010-2011.

Karima, Tejinder Kaur, Building Robots with LEGO NXT, Minor Project, M.Sc. Semester III, 2010-2011.

Anjani, Geetanjali Shivas, Steganography and Steganalysis, Minor Project, M.Sc. Semester III, 2010-2011.

Ruchika Bajaj, Shweta Jain, Finding best hiding capacity scheme for variable length messages, Major Project, M.Sc. Semester IV, 2009-2010.

Mukesh Jain, Preksha Gupta, A Web based Monitoring System using Robots, Major Project, M.Sc. Semester IV, 2009-2010.

Rajni Singh, Taranpreet Kaur, Use of Robots for ensuring Security in a closed region, Major Project, M.Sc. Semester IV, 2009-2010.

Isha Gupta, Shruti Mehra, Enhancing Expert System for Multilingual Scenario, Major Project, M.Sc. Semester IV, 2009-2010.

Ruchika Bajaj, Shweta Jain, Using AI techniques for Security, Minor Project, M.Sc. Semester III, 2009-2010.

Mukesh Jain, Preksha Gupta, Robotics and Multi-agent systems, Minor Project, M.Sc. Semester III, 2009-2010.

Rajni Singh, Taranpreet Kaur, Understanding how robots take actions, Minor Project, M.Sc. Semester III, 2009-2010.

Isha Gupta, Shruti Mehra, Ontology-Based Expert Systems, Minor Project, M.Sc. Semester III, 2009-2010.

Deepak Bammi, Natasha Jain, *Ontology Extraction from Text*, Major Project, M.Sc. Semester IV, 2008-2009.

Neha Mishra, Vandita Vats, Avoiding Threats using MAS planning, Major Project, M.Sc. Semester IV, 2008-2009.

Nikhil Malik, Ranjan Yadav, Ontology based Expert System, Major Project, M.Sc. Semester IV, 2008-2009.

Deepak Bammi, Natasha Jain, Semantic Web Based e-learning, Minor Project, M.Sc. Semester III, 2008-

2009.

Neha Mishra, Vandita Vats, Planning in Agents, Minor Project, M.Sc. Semester III, 2008-2009.

Nikhil Malik, Ranjan Yadav, Web based Ontology Editor, Minor Project, M.Sc. Semester III, 2008-2009.

Divya, Nidhi Misra, Solving Network Congestion using Swarm Intelligence: Simulation using a Network Simulator, Major Project, M.Sc. Semester IV, 2007-2008.

Jyotsna Talreja, Mansi Sood, Using Web Mining Techniques to Generate Recommendations: Website Recommender System, Major Project, M.Sc. Semester IV, 2007-2008.

Karan Gupta, Sandeep Bansal, Web Ontology Editor, Major Project, M.Sc. Semester IV, 2007-2008.

Shefali Bhargava, Shivani Sen, Acclimatizing the Learning Style of e-learning, Major Project, M.Sc. Semester IV, 2007-2008.

Payal Arora, Malvika Gaur, Fingerprint Image Enhancement Using Fuzzy Logic, Major Project, M.Sc. Semester IV, 2007-2008.

Divya, Nidhi Misra, Solving Network Congestion using Swarm Intelligence, Minor Project, M.Sc. Semester III, 2007-2008.

Jyotsna Talreja, Mansi Sood, Use of Web Mining Techniques for generating Recommendations, Minor Project, M.Sc. Semester III, 2007-2008.

Karan Gupta, Sandeep Bansal, Information Retrieval from Temporal Ontologies, Minor Project, M.Sc. Semester III, 2007-2008.

Shefali Bhargava, Shivani Sen, Personalizing e-contents, Minor Project, M.Sc. Semester III, 2007-2008.

Payal Arora, Malvika Gaur, Fingerprint Image Enhancement Techniques, Minor Project, M.Sc. Semester III, 2007-2008.

Richa Gupta, Saurabh Jain, Towards Self-organizing Web Sites, Major Project, M.Sc. Semester IV, 2006-2007.

Neha Mehdiratta, Silky Dhand, ACO algorithm for dynamic TSP, Major Project, M.Sc. Semester IV, 2006-2007.

Maulein Singh, Ramneet Kakkar, Recommender System Using ACO, Major Project, M.Sc. Semester IV, 2006-2007.

Mohit Gupta, Manisha Bansal, Analyzing Information Retrieval from Ontologies, Major Project, M.Sc. Semester IV, 2006-2007.

Richa Gupta, Saurabh Jain, Web Session Clustering using ACO, Minor Project, M.Sc. Semester III, 2006-2007.

Neha Mehdiratta, Silky Dhand, ACO algorithm for TSP, Minor Project, M.Sc. Semester III, 2006-2007.

Maulein Singh, Ramneet Kakkar, Discovering classification rules using ACO, Minor Project, M.Sc. Semester III, 2006-2007.

Mohit Gupta, Manisha Bansal, Particle Swarm Optimization, Minor Project, M.Sc. Semester III, 2006-2007.

Baljeet Kaur, E-MDS: An Online Medical Diagnosis System, Major Project, M.Sc. Semester IV, 2005-2006.

Shikha Sablok, Expert System On The Web: A Case Study on Nutrition(ESN), Major Project, M.Sc. Semester IV, 2005-2006.

Renu, Information Retrieval From Ontologies, Major Project, M.Sc. Semester IV, 2005-2006.

Baljeet Kaur, Shikha Sablok, Expert Systems on the Web, Minor Project, M.Sc. Semester III, 2005-2006.

Renu, Exploring Web Intelligence, Minor Project, M.Sc. Semester III, 2005-2006.