Curriculum Vitae

Dr. ASHOK KUMAR MEHTA

Associate Professor, Dept. of Computer Applications National Institute of Technology, Jamshedpur-831014, Jharkhand, India

Office: 2374121

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Date of Birth: December 26, 1958

Marital Status: Married

Nationality: Indian

Residence: C-12, NIT Campus, NIT Jamshedpur-831014

Doctoral Programme

Ph. D., 2015, **Jadavpur university**, **Kolkata**, India. **Thesis Topic:** "Reliability Evaluation of an Interconnected Power System in Deregulated Environment".

Postgraduate Programme

M. Tech.: *Power Systems*, (CGPA 8.83), 1988, **R. I. T., Jamshedpur**, Ranchi University.

Undergraduate Programme

B. Sc. Engineering: *Electrical Engineering*, (First Class with Distinction, 72.53%), 1985, **R. I. T., Jamshedpur**, Ranchi University.

Current Research

Application of Soft Computing.

Employment

Job profile includes both undergraduate and postgraduate teaching and research at the National Institute of Technology Jamshedpur (www.nitjsr.ac.in)



- (a) Feb. 1997- Continuing, Associate Professor, National Institute of Technology Jamshedpur, India
- (b) June 1995 January 1997, Senior Lecturer, Electrical Engg. Department, R. I. T. Jamshedpur, India.
- (c) August 1988 May 1995, Lecturer, Electrical Engg. Department, R. I. T. Jamshedpur, India.

Subjects Taught

- (a) U.G. Level: Introduction to Computer Programming & Internet Technology, Programming & Data Structure
- (b) P.G. Level: Computer Organization & Architecture, System Software & C Programming, Business Data Processing, Microprocessors & their Interfacing, Parallel & Distributed Processing, System Simulation & Modeling, Soft Computing, Pattern Recognition

Research

Ph. D. Theses Supervised: 02 under progress

M. Tech. Theses Supervised: 09

MCA Theses Supervised: More than 100

Awards and Recognitions

Merit Scholarship in B. Sc. Engineering

GATE Fellowship from 1985-1987.

Membership of Professional Societies:

- 1. Life member of ISTE, LM14315
- 2. Fellow, The Institution of Engineers (India), F 111245 3
- 3. Member, IEEE, 90683685

Administrative Responsibilities held:

a) Department Level:

- Prof. In-Charge, Department Time-Table
- Departmental In-Charge of Student Project & Training

- Chairman, Departmental Purchase Committee
- Head of the Department, Dept. of Computer Applications (More than 5 years)
- Chairman, Departmental Academic Committee
- Principal Investigator of the MHRD Project "Modernization of MCA Computer Lab."

b) Institute Level:

- Member, Training & Placement (1999-2003)
- Prof. In-Charge, Athletics (1999-2003)
- Warden (About 6 Years)
- Prof. In-Charge, Exam. (UG) 03.10.2001 to 05.12.2003
- Dy. Centre Superintendent J. E. E. screening test of I. I. T., 2002
- Member, MCA Admission Committee 2002-2007
- Convener, Enquiry Committee for suspension of Sri S. C. Deo, Lecturer
- Member, Purchase Committee, Computer Centre
- Member, Purchase Committee, Establishment Section
- Member, Digital Campus Committee
- Prof. In-Charge, Community Welfare
- Member, Admission Committee (PG & R) for 2016-17 & 2017-18
- Member, Unnat Bharat Abhiyan
- Zonal Co-ordinator, Rashtriya Avishkar Abhiyan

Areas of Interest:

Reliability Evaluation, Pattern Recognition, Soft Computing, Machine Learning

M.Tech. Theses Supervised: 9

- 1. Noel Rittick Bar, "Network intrusion detection systems using decision trees and random forest", 2020.
- 2. Anku Kumari, "A hybrid intrusion detection system based on decision trees and support vector machine", 2020.
- 3. Vivek Vishal, "Study and design of intelligent network vulnerability detection system", 2019.
- 4. Vartika Dwivedi, "Enhancements to Intel security libraries for data center covering latest cryptographic algorithms and additional data integrity verification features", 2019.

- 5. Parminder Singh, "Analysis and design of classification system for detection of malicious IP addresses", 2018.
- 6. Yanamadala Ragini, "Location privacy preservation in database-driven wireless cognitive networks using cache memory", 2018.
- 7. Abhishikt V. V., "Binary Fuzzing Using Concolic Execution", 2017.
- 8. Mona, "Comparision of Feature Selection Algorithm for the Classification of Malicious and Benign Java Script", (Co-Supervisor, Dr. S. S. Ghosh), 2017.
- 9. Avinash Dubey, "A Novel Approach for HDFS Data Security in Hadoop", (Co-Supervisor, Dr. C. Azad), 2017.

MCA Theses Supervised (Last 6 years only): 50

- 1. Megha Sinha, "Text classifier", (Co-Supervisor, Mr. Shailesh Tamboli), 2020.
- 2. Garima Sisodiya, "Employability assessment system", (Co-Supervisor, Mr. Mailanie Jauhar), 2020.
- 3. Sonam Gupta, "Project template manager", (Co-Supervisor, Mr. Krishna Kishore K), 2020.
- 4. Sharvari Wagle, "COVID-19 Symptom Risk Analyzer", (Co-Supervisor, Mrs. Neha Agrawal), 2020.
- 5. Arti Rajput, "Trackit Mobile Application", 2020.
- 6. Mohammad Zaid Khan, "Adding swipe features in keyboard", (Co-Supervisor, Mr. Ashfaq Ahmed), 2020.
- 7. Ajay Kumar Mandliya, "Institute information system", (Co-Supervisor, Mr. Rajendra Yadav), 2020.
- 8. Shivani Vyas, "Patient demographics historical order", (Co-Supervisor, Mrs. Ranjini), 2020.
- 9. Nitish Chander Sati, "Jugnoo taxi", (Co-Supervisor, Mr. Abhishek Kaushik), 2020.
- 10. Shambhavi, "Automation of approval of financial reports", (Co-Supervisor, Mr. Yogesh Khemka), 2020.
- 11. Shikha Dwivedi, "Online national tourism administration system", (Co-Supervisor, Mr. Pavan), 2019.
- 12. Manisha Biruli, "E-shopping cart", (Co-Supervisor, Mr. S. Subramanyam), 2019.
- 13. Aman Porwal, "Marker creation automation", (Co-Supervisor, Mr. J. Thakkar), 2019.
- 14. Akash Deep Shukla, "People finder", (Co-Supervisor, Mrs. S. Dolly), 2019.
- 15. Ayush Partani, "ATM incident management system", (Co-Supervisor, Mr. S. Gawatiya), 2019.

- 16. Tarun Sharma, "Whatsapp banking (chatbot)", (Co-Supervisor, Mr. S. K. Irulappan), 2019.
- 17. Pancham Lal Rajak, "Online blood bank management system", (Co-Supervisor, Mr. R. Sharma), 2019.
- 18. Gautam Barfa, "An android application for theater booking", (Co-Supervisor, Mr. R. Deepak), 2019.
- 19. Anurag Rastogi, "Knowledge management system", (Co-Supervisor, Mr. R. Sahu), 2019.
- 20. Kanika Parnami, "Merchant locator", (Co-Supervisor, Mrs. B. Madan), 2019.
- 21. Chandrima Jain, "Hiring occupation authority", (Co-Supervisor, Mr. N. V. Bhaskar), 2018.
- 22. Md. Saddam Hussain, "Cryptology for security", (Co-Supervisor, Mr. R. R. Kumar), 2018.
- 23. Ruchi Kaur, "E-Wallet canteen pay", (Co-Supervisor, Mr. M. Kumar. S), 2018.
- 24. Surbhi Bharti, "Web information security", (Co-Supervisor, Mr. R. R. Kumar), 2018.
- 25. Harsh Deep Negi, "Online project modules verification system", (Co-Supervisor, Mr. N. V. Bhaskar), 2018.
- 26. Shweta Bharti, "Recruitment management system", (Co-Supervisor, Mr. D. Nagarjuna), 2018.
- 27. Rima Divyanshi, "Prodigious India", (Co-Supervisor, Mr. D. Mahto), 2018.
- 28. Ishwar Kumar Singh, "Web Information Protection using SSL Algorithm", (Co-Supervisor, Mr. P. Ramesh), 2017.
- 29. Anil Kumar, "Wealth Management, Intellect FABX(UNB)", (Co-Supervisor, Mr. Srinivasa.P. Rao), 2017.
- 30. Rahul Kumar, "3-D Modeling and Animation using Autodesk Maya", (Co-Supervisor, Mr. Arun Veer Singh), 2017.
- 31. Vivek Ranjan Gupta, "Asset Liabilities and Management", (Co-Supervisor, Mrs. Namrata Shah), 2017.
- 32. Sabyasachee Dash, "Distribution Cloud Application using MongoDB", (Co-Supervisor, Mr. Saurabh Agarwal), 2017.
- 33. Kumar Ratnam, "Pradhan Mantri Adarsh Gram Yojna", (Co-Supervisor, Mr. Sanjeev Gahlaut), 2017.
- 34. Aarti Singh, "Kanban Board", (Co-Supervisor, Mr. Abhishek Tiwari), 2016.
- 35. Abhimanyu Kumar, "E Movie Tickets", (Co-Supervisor, Mr. T. Rajesh), 2016.
- 36. Abhiskek Bharti, "Online Airline Reservation System", (Co-Supervisor, Mr. T. Rajesh), 2016.
- 37. Abhishek Gaurav, "Automated Handson QP Bank", (Co-Supervisor, Mr. Sivaprasath CM), 2016.
- 38. Aditya Tyagi, "Online Tutorial System", (Co-Supervisor, Mr. P Kiran), 2016.
- 39. Ajeet Kumar, "Android Attack Application", (Co-Supervisor, Mr. Venkata Reddy), 2016.
- 40. Akalabya Singh, "Application Repackaging", (Co-Supervisor, Mr. P. B. Kotur), 2016.

- 41. Manish Kumar, "Online Recruitment System", (Co-Supervisor, Mr. Dindayal Mahto), 2015.
- 42. Deepika, "MFS Provider Wallet", (Co-Supervisor, Mr. Gyanesh Singh), 2015.
- 43. Amit Kumar Trivedi, "Travel Management System", (Co-Supervisor, Mr. Neeraj Kumar), 2015.
- 44. Anju Kumari, "Easy and Safe Bus Reliable Service", (Co-Supervisor, Mr. V Sravan Kumar), 2015.
- 45. Annant Lal Gupta, "Online Institute Management System", (Co-Supervisor, Mr. Avnish Kr. Singh), 2015.
- 46. Ranjeet Kumar, "E-Post Office System", (Co-Supervisor, Mr. Tanay Mishra), 2015.
- 47. Samriddha Biswas, "Introduction to Credit Risk Management, PCLI and Affordability", (Co-Supervisor, Mr. Alok Rustagi), 2015.
- 48. Sneha Bhowmick, "Payments and Services Hub", (Co-Supervisor, Mr. Krishnananda Pai), 2015.
- 49. Dharmendra Pratap Singh, "Multimedia Streaming Protocols", (Co-Supervisor, Ms. Soma Bandhyopadhyay), 2015.
- 50. Pranesh Kumar, "Document Protector with Watermark Maker", (Co-Supervisor, Mr. A. Haribabu), 2015.

List of Publications

(a) Journals

- 1. S. Jha, **A. K. Mehta**, C. Azad, "A fuzzy logic based approach for prediction of basal cell carcinoma and squamous cell carcinoma among the data of skin cancer," *EAI Endorsed Transactions on Pervasive Health and Technology* (08 2019 05 2020) Volume 5, Issue 20, e4.
- 2. S. P. Singh, V. P. Singh, **A. K. Mehta**, "Differential evolution using homeostasis adaption based mutation operator and its application for software cost estimation," *Journal of King Saud University-Computer and Information Sciences* (2018) Jun 15.
- 3. P. Singh, C. Azad, A. K. Mehta, "Intrusion detection system using classification approach in data mining," *International Journal of Advanced Research in Computer Science* (2018) Jul 1;9(4):20.

- 4. A. Dubey, **A. K. Mehta**, C. Azad, "A Novel Approach for Information Security in Hadoop," *International Journal for Computer and Mathematical Sciences* 6.6 (2017): 42-47
- 5. Mona, **A. K. Mehta**, S. S. Ghosh, "Comparison of Feature Selection Algorithm for Classification of Malicious and Benign Java Script," *International Journal of Innovations and Advancement in Computer Science* 6.6 (2017): 57-62
- 6. S. K. Gouda, A. K. Mehta, "Load Balancing in Homogeneous Broadcast Distributed Systems and Grid Networks," *International Journal of Electronics Communication and Computer Engineering* 7.3 (2016): 200-204
- 7. **A. K. Mehta**, K. Bhattacharya, D. Ray, "Application of Support Vector Network for Power System Static Security Evaluation," *International Journal of Energy Optimization and Engineering (IJEOE)* 4.1 (2015): 55-67.
- 8. **A. K. Mehta**, D. Ray, K. Bhattacharya, "Application of Reliability Analysis in Expansion of Transmission System," *International Journal of Recent Trends in Engineering and Technology* 1.2 (2009).

(b) International Conferences

- 1. S. K. Gouda, A. K. Mehta, "An improved differential evolution algorithm with self adaptive mutation strategies for global optimization," in Proceedings of the 2020 *International Conference on Contemporary Computing and Applications(IC3A)* February 2020, (pp. 87-91) IEEE DOI: 10.1109/IC3A48958.2020.233276
- 2. S. Jha, **A. K. Mehta**, C. Azad, "A fuzzy logic based approach for prediction of basal cell carcinoma," in Proceedings of the *Fourth International Conference on Soft Computing Theories and Applications* (SoCTA2019), Advances in Intelligent Systems and Computing 1154(pp. 325-334), Springer, Singapore, https://doi.org/10.1007/978-981-15-4032-5 30
- 3. C. Azad, A. K. Mehta, V. K. Jha, "Evolutionary Decision Tree-Based Intrusion Detection System," in Proceedings of the *Third International Conference on Microelectronics, Computing and Communication Systems* 2019 (pp. 271-282), Springer, Singapore.
- 4. C. Azad, **A. K. Mehta**, V. K. Jha, "Improved data classification using fuzzy euclidean hyperbox classifier," *International Conference on Smart Computing and Electronic Enterprise* (*ICSCEE*) 2018 Jul 11 (pp. 1-6). IEEE DOI: 10.1109/ICSCEE.2018.8538389

5. **A. K. Mehta**, D. Ray, and K. Bhattacharya, "Reliability evaluation of an interconnected system in deregulated market," *International Power Engineering Conference (IPEC 2007)*, pp.270-275, 3-6 Dec. 2007,

 $URL: \underline{http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=\&arnumber=4510040\&isnumber=4509990$

6. **A. K. Mehta**, D. Ray, and K. Bhattacharya, "Substation reliability in a restructured power system," *International Power Engineering Conference (IPEC 2007)*. pp.788-793, 3-6Dec.2007,

URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4510133&isnumber=45 09990