

## Curriculum Vitae

### **Dr. Monika**

Associate Professor (Information Technology)  
University Institute of Engineering and Technology  
Panjab University, Chandigarh.  
M: 8968175076

Email: [monikash@pu.ac.in](mailto:monikash@pu.ac.in)  
: [monikahsp@gmail.com](mailto:monikahsp@gmail.com)



### **Research Interests:**

- Generative AI, Deep Learning, Machine Learning
- Social Network Analysis (Community Detection, Information Flow Analysis)
- Data Mining, Software Engineering

### **Academic Qualifications:**

S.no.	Degree	Year	Subject	University/Institute
1.	B.E.	2005	Information Technology	Kurukshetra University
2.	M.E.	2008	Information Technology	U.I.E.T., Panjab University, Chandigarh
3.	Ph.D.	2023	Information Technology	Panjab University, Chandigarh.
4.	Gate Qualified	2007	Information Technology	AIR 47, IIT Kanpur

### **Work experience (in chronological order):**

S.no.	Position held	Name of institution	From	To
1.	Lecturer	Dr. B R Ambedkar NIT , Jalandhar	<b>21.07.2008</b>	<b>04.06.2010</b>
2.	Assistant Professor Stage-1	U.I.E.T, Panjab University, Chandigarh	1.07.2010	30.06.2015
3.	Assistant Professor Stage-2	U.I.E.T, Panjab University, Chandigarh	1.07.2015	30.06.2020
4.	Assistant Professor Stage-3	U.I.E.T, Panjab University, Chandigarh	1.07.2020	30.06.2023
5.	Associate Professor	U.I.E.T, Panjab University, Chandigarh	1.07.2023	Till date

### **M.E. and Ph.D. Students Guidance:**

- Number of M.E. students guided: 15
- No. of Ph.D. students registered: 2

### **International/National Industry & Research Organisation Collaborations:**

- Joint GIAN proposal with **Prof. Maninder, Vice-Chair** (Power Electronics/Solid-State Circuits/Circuit and System Society) **UAE Chapter IEEE**.
- Conducted **IBM skill Build Programme** for UG students to bridge the gap between academic knowledge and practical industry skills.
- Attended **Infosys Campus Connect Technology** Train the Trainer Programme at Infosys campus, Chandigarh.
- Attended FDP on Business Intelligence & Cloud Computing conducted by **TATA CONSULTANCY SERVICES**.

### **Research Publications:**

#### **List of Journals:**

1. Samrit, Monika, “A Pragmatic Evaluation of Performance Testing for E-commerce Web based Applications”, Journal Of Emerging Technologies And Innovative Research, Vol. 10, No. 8, August, 2023, pp. b718-b745.
2. Samrit, Monika, “Performance Testing of Web Applications: A Meta-Analysis”, Advanced Engineering Science, Vol.55, No. 10, June, 2023, pp. 3827-3848.
3. Monika, V. Mangat, “Multidimensional empirical analysis of overlapping community detection methods in social networks”, Multimedia Tools and Applications, Vol 82, April, 2023, pp. 44655- 44671.
4. Monika, V. Mangat, “Label Propagation Based Overlapping Community Detection”, IEEE Access, Vol 10, December, 2022, pp. 126052-126061.
5. Kanika Sharma, Monika, “Multidimensional Comparative Study of State-of-the-Art Retinal Image Enhancement Techniques”, Journal Of Electronics Information Technology Science And Management, Vol. 12, No. 10, October, 2022, pp. 51-65.
6. Monika, V.Mangat, “Diversified Overlapping Community Detection Methods in Social Networks: A Survey”, Advanced Engineering Science, Vol. 54, No. 05, July, 2022, pp. 1943-1960.
7. Narinder Pal Singh, Monika, Nidhi, “An approach for the mobile application on the applicability of evolutionary computation to measure software metrics”, Journal of Advanced Research in Dynamical and Control Systems, Vol. 9, 2017, pp. 2072-2083.
8. Dalbir Kaur, Monika, “Software Reliability Models: Time between failures and Accuracy estimation”, International Journal of Computer Science and Information Technologies, Vol. 6, No.4, 2015, pp. 3370-3373.
9. Jagdish Singh, Monika, “Performance Evaluation and Comparison of Sahi Pro and Selenium Webdriver”, International Journal of Computer Applications, Vol. 129, No. 8, November, 2015, pp. 23-26.
10. Sugam Srivastava, Monika, “Neural Network analysis of Software Reliability Growth Models”, International Journal of Application or Innovation in Engineering & Management, Vol. 3, No. 11, November, 2014, pp. 212-217.
11. Rigzin Angmo, Monika, “Selenium Tool: A Web based Automation Testing

- Framework”, International Journal of Emerging Technologies in Computational and Applied Sciences, Vol.14, 2014, pp. 351-355.
12. Monika, Rigzin Angmo, “Web based Automation Testing and Tools”, International Journal of Computer Science and Information Technologies, Vol. 5, No. 1, 2014, pp. 908-912.
  13. Karamvir Kaur, Monika, “Review of Defect Prediction through Variants of COQUALMO Model”, International Journal of Software and Web Sciences, Vol. 13, 2013, pp. 94-97.
  14. Monika, Mukti Chauhan, “A Roadmap of Software System Maintainability Models”, International Journal of Software and Web Sciences, Vol. 12, 2013, pp. 69-73.
  15. Puja Saxena, Monika, “Empirical Studies to Predict Fault Proneness: A Review”, International Journal of Computer Applications, Vol. 22, No.8, May, 2011, pp. 41-45.

#### **List of Conferences:**

1. Pankaj Kumar, Monika, “Improved Tweet Sentiment Analysis by Features Weight Optimize by GWO and Classify by XG-Boost” International Conference on Sentiment Analysis and Deep Learning, Nepal, 16-17 June, 2022, pp. 607-614.
2. Monika, Veenu Mangat, “Modelling Information Flow in Social Networks : Metrics and Evaluation”, International Conference on Intelligent Computing, India, 25-26 March, 2022, pp. 8-14.
3. Pawan Kumar, Veenu Mangat, Monika, “Review of Different ML Techniques Used for Heart Disease Prediction”, International Conference on Information and Communication Technology for Intelligent Systems, India, October 2022, pp. 1-6.
4. Monika, Veenu Mangat, “Analytical Modeling of Real World Social Network Parameters”, International Conference on Inventive Communication and Computational Technologies, India, pp. 677-684.
5. Monika, A. Jindal, “Optimized Task Scheduling Algorithm for Cloud Computing”, International Conference on ICT for Sustainable Development, 2018, pp. 431-439.
6. Monika, A. Jindal, “Optimization of Task Scheduling Algorithm through QoS Parameters for Cloud Computing”, 4<sup>th</sup> International Conference on Advancements in Engineering & Technology, 2016, pp. 1-4.

#### **Books Published:**

1. Statistical Techniques and Metrics for Software Quality Prediction, Monika, Lambert Academic Publishing, ISBN :978-620-6-16412-8.

#### **Academic/Administrative Responsibilities / Membership Professional Bodies:**

- ISTE (Indian Society for Technical Education) – Life Member
- In-charge of Employability Test conducted for UG students(UIET) under initiative of NPIU (National Project Implementation Unit) during 2020-21.
- In-charge of IQAC committee of Information Technology department.
- Organizing member of internal Smart India Hackathon (SIH 2022, 2023).
- Organizing member of Institution’s Innovation Council (IIC, scheme of MHRD) during 2022-23.

- Member of Board of Studies (Information Technology).
- Member of Joint Academic and Administrative Committee, UIET ( JAAC 2024).

(Monika)