

Dr. Preeti Kaur

Designation, Qualifications: Associate Professor in department of Computer Science and Engineering, NSUT, PhD, M tech.

Areas of Interest: Software Engineering, Compiler Design, Machine learning, Big Data.

Email: preeti.kaur@nsut.ac.in, preetikaur1@rediffmail.com

PUBLICATIONS

Journals

- Sangeeta Sabharwal, Preeti Kaur, Ritu Sibal. "Deriving and Validating Fault Metric for Object Oriented Systems using Use Case Diagram", International Journal of Information Technology volume 13, pp. 1309–1321, 2021.
- Sangeeta Sabharwal, Preeti Kaur, Ritu Sibal. "Applying Page Rank and HITS Algorithm to Identify Key Use Cases", Journal of Applied Science and Engineering, vol. 21, no. 4, pp- 655-662, 2018.
- Sangeeta Sabharwal, Preeti Kaur, Ritu Sibal. "Empirical and Theoretical Validation of a Use Case Diagram Complexity Metric", International Journal of Information Technology and Computer Science, vol. 11, pp. 35-47, 2017.
- Preeti Kaur, Ritu Sibal, Sangeeta Sabharwal. "A User Story Based Approach to Measure System Complexity in Agile Software Development". International Journal of Control Theory and Applications, vol. 10(8), pp. 99-111, 2017.

Conferences

- Sangeeta Sabharwal, Ritu Sibal, Preeti Kaur. "Deriving Complexity Metric based on Use Case Diagram and its Validation", in proceedings of the IEEE International Symposium on Signal Processing and Information Technology (ISSPIT), pp. 102-107, 2014.
- Ritu Sibal, Preeti Kaur, Chayanika Sharma. "Prioritization of User Story Acceptance Tests in Agile Software Development using Meta Heuristic Techniques and Comparative Analysis", in proceedings of the International Conference Towards Extensible and Adaptable Methods in Computing (TEAMC). 2018.
- Preeti Kaur, Priti Bansal and Ritu Sibal. "Prioritization of Test Scenarios Derived from UML Activity Diagram Using Path Complexity". CUBE 2012, Pages5-359 ACM New York, USA. 2012.
- Sangeeta Sabharwal, Ritu Sibal and Preeti Kaur. "Software complexity: A fuzzy logic approach," 2012 International Conference on Communication, Information & Computing Technology (ICCICT), Mumbai, pp. 1-6, 2012.
- Akshay Chadha and Preeti Kaur. "Comparative analysis of recommendation system," 2015 4th International Symposium on Emerging Trends and Technologies in Libraries and Information Services, Noida, pp. 313-318, 2015.
- Akshay Chadha and Preeti Kaur. "A Mixed Hybrid Recommendation System Based on Rough Set Theory", 2nd International Conference on Computing for Sustainable Global Development (INDIACOM), 11th - 13th March, New Delhi, pp. 70-75, 2015.
- Nilay Shrivastava, Astitwa Saxena, Yaman Kumar, Rajiv Ratn Shah, Amanda Stent, Debanjan Mahata, Preeti Kaur, Roger Zimmermann. "MobiVSR: Efficient and Light-weight Neural Network for Visual Speech Recognition on Mobile Devices", Interspeech, Graz, pp. 2753-2757, 2019.
- Prateek Juneja and Preeti Kaur. "Software Engineering for Big Data Application Development: Systematic Literature Survey Using Snowballing," International Conference on Computing, Power and Communication Technologies (GUCON), New Delhi, India, pp. 492-496, 2019.
- Riya Pannu, Devansh Jain Nawal, Akshat Krishna, Amarjit Malhotra, Preeti Kaur. "EVA: AI Nutritionist and Health coach", in International Conference on Latest advancements and Future Trends in Engineering, Science, Humanities and Management. pp. 256-265, 2020.
- Shaswat Patel, Preeti Kaur. "Leveraging User Comments in Tweets for Rumor Detection", in 4th International Conference on Innovative Computing & Communication, Delhi, 2021.
- Archit Prashant Patil, Parikansh Ahluwalia, Siddharth Yadav, Preeti Kaur. "Classification and Transfer of Accented Voice using RNN and GAN", in International Conference on Computational Intelligence in Analytics and Information System, 2021.
- Nipun Jain, Mohit Motiani, Preeti Kaur. "Stock Direction Prediction", in International conference on Advanced Computing and Intelligent Technologies, Delhi, 2021

- Kartikey Khullar, S Kathuria, N Chahar, P Gupta, Preeti Kaur. “A Quantitative Comparison of Image Classification Models under Adversarial Attacks and Defenses”, in the International Conference on Signal Processing and Integrated Networks (SPIN), pp. 6-10, 2021.
- Gurshaan Singh Bajaj, Harsh Yadav, Harshdeep Singh Sahdev, Sudhanshu Sah, Preeti Kaur, “Mental health analysis during COVID-19: A comparison before and during the pandemic”, in IEEE 4th International Conference on Computing, Power and Communication Technologies (GUCON), pp.1-7, 2021.

Book Chapters

- Akshay Chadha and Preeti Kaur. “Handling Smurfing through Big Data”, In Big Data Analytics. Advances in Intelligent Systems and Computing, vol. 654. Springer, Singapore, 2018.

MTECH THESIS GUIDED

- COVID-19 Fake News Detection in India
- Software Engineering for Big Data Application Development
- Improving Class Diagram Abstraction with Graph Based Ranking Algorithms
- Real Time Lane Finding for Autonomous Cars
- Profile Injection Attack Detection in Recommender System’ Sentiment Analysis of Twitter Data for Recommending YouTube Video URL
- Sentiment Analysis of Political Decisions using a Hybrid Approach
- Improving Recommendation System through Vagueness Analysis

PROJECTS GUIDED (for Undergraduate and Post-Graduate Students. Few are listed below.)

- Crime Prediction Application using Artificial Intelligence
- Autonomous Path Finding and Obstacle Avoidance using PSO
- Classification and Transfer of Accented Voice
- Real Time Web Page Generation
- Hand Gesture based Smart Assistant
- Analysis of Anthropogenic Effect on Indian Climate
- Lip reading for Resource Constrained Devices
- Driver Drowsiness and Distraction Detection
- Detecting Vindictive Behavior from Social Media
- Improving Recommendation System through Vagueness Analysis
- Detecting Vindictive Behavior from Social Media in Code Switched Languages using NLP and Vision Techniques
- Sentiment Analysis of Twitter Data for Recommending You-tube Video URL
- US Election Prediction
- Stock Price Forecasting using Supervised Learning Methods
- Mental Health Analysis during COVID-19: A Comparison Before and During the Pandemic
- Abstractive Text Summarization Using GANs and Transformer Networks
- A Quantitative Comparison of Image Classification models under Adversarial attacks and defenses
- Classification and Transfer of Accented Voice using RNN and GAN

TEACHING EXPERIENCE

I teach the following subjects

- Software Engineering
- System Analysis and Design
- Requirements Engineering
- Compiler Construction
- Theory of Automata and Computation
- Big Data Analytics
- Operating Systems
- Data Structures
- Programming-C, C++, Python
- Object Orientation