

Dr. Ravreet Kaur, Assistant Professor (Computer Science & Engineering), University Institute of Engineering & Technology, Panjab University, Chandigarh. E-mail ID: ravreetkaur@pu.ac.in Phone no.: 8968500084

Education:

Ph. D. Guru Nanak Dev University, Aug 2020

M.Tech. (CSE) Guru Nanak Dev University, Dec 2010 (1st position in University – Gold Medal)

B.Tech. (CSE) Guru Nanak Dev University, May 2009

Teaching Experience:

Assistant Professor (Computer Science & Engineering), UIET, PU Chandigarh. From 22-June-2015 till date

Guest Faculty, University Institute of Engineering & Technology (PU), Chd For the session Jun 2014 -2015

Assistant Professor, Guru Nanak Dev University, Asr From 4-Oct-2011 to 25-Aug-2014

Assistant Professor, Khalsa College of Engineering and Technology, Asr From 7-Jan-2011 to 3-Oct-2011

Teaching Interests:

Algorithm Analysis and Design, Computer Architecture & Organization, Computer Networks, Neural Networks

Research Interests:

Machine Learning, Image Processing, Medical Image Analysis

Publications in Journals/Conferences:

- Preeti Aggarwal, Namrata Marwaha, Ravreet Kaur and Ajay Mittal, "Lung cancer survival prognosis using a two – stage modelling approach", published in Multimedia Tools and Applications journal, Springer, January 2024. (SCI). DOI: https://doi.org/10.1007/s11042-024-18280-2
- Shrutika Chawla, Ravreet Kaur and Preeti Aggarwal, "Text classification framework for short text based on TDIDF FastText", published in Multimedia Tools and Applications journal, Springer, April 2023. (SCI). DOI: https://doi.org/10.1007/s11042-023-15211-5
- Manpreet Kaur, Vishal Gupta and Ravreet Kaur, "Semantic-Based Integrated Plagiarism Detection Approach for English Documents", IETE Journal of Research, September 2023. (SCI). DOI: <u>https://doi.org/10.1080/03772063.2021.2004383</u>
- Maya Thapa and Ravreet Kaur, "Deep Learning-Based Multi-Label Image Classification for Chest X-Rays", In: Mehta, G., Wickramasinghe, N., Kakkar, D. (eds) Innovations in VLSI, Signal Processing and Computational Technologies. WREC 2023. Lecture Notes in Electrical Engineering, vol 1095. Springer, Singapore. DOI: <u>https://doi.org/10.1007/978-981-99-7077-3 17</u>
- Junaid Maqbool, Preeti Aggarwal, Ravreet Kaur et. al. "Stock Prediction by Integrating Sentiment Scores of Financial News and MLP-Regressor: A Machine Learning Approach", Procedia Computer Science, Volume 218, pp. 1067-1078. (2023). DOI: https://doi.org/10.1016/j.procs.2023.01.086
- Kritika Sharma and Ravreet Kaur, "Blockchain-based system for Traceability of Counterfeit Medicine", In: García Márquez, F.P., Jamil, A., Eken, S., Hameed, A.A. (eds) Computational Intelligence, Data Analytics and Applications. ICCIDA 2022. Lecture Notes in Networks and Systems, vol 643. Springer, Cham. DOI: https://doi.org/10.1007/978-3-031-27099-4_31
- Namrata Marwaha, Preeti Aggarwal and Ravreet Kaur, "Lung Cancer Survivability prediction with Recursive Feature Elimination using Random Forest and Ensemble Classifiers", 2nd International

Conference on Computing and Machine Intelligence (ICMI)-IEEE, July 2022. DOI: 10.1109/ICMI55296.2022.9873658.

- Junaid Maqbool, Preeti Aggarwal and Ravreet Kaur, "Incorporating Financial News Sentiments and MLP-Regressor with Feed-Forward for Stock Market Prediction", In: Singh, P.K., Kolekar, M.H., Tanwar, S., Wierzchoń, S.T., Bhatnagar, R.K. (eds) Emerging Technologies for Computing, Communication and Smart Cities. Lecture Notes in Electrical Engineering, vol 875. Springer, Singapore. DOI: https://doi.org/10.1007/978-981-19-0284-0_5
- Shrutika Chawla, Preeti Aggarwal and Ravreet Kaur, "Comparative analysis of semantic similarity word embedding techniques for paraphrase detection", In: Singh, P.K., Kolekar, M.H., Tanwar, S., Wierzchoń, S.T., Bhatnagar, R.K. (eds) Emerging Technologies for Computing, Communication and Smart Cities. Lecture Notes in Electrical Engineering, vol 875. Springer, Singapore. DOI: https://doi.org/10.1007/978-981-19-0284-0_2
- 10. Mandeep Kaur Dhami, Inderpal Pasricha, Ravreet Kaur et. al, "A Review of Machine Learning Applications in Material Science", published in book: Advances in Manufacturing Technology (CRC Press), January 2022. eBook ISBN: 9781003203681
- 11. Vaneet Kaur, Preeti Aggarwal and Ravreet Kaur, "A Fast Block Based Technique to detect Copy – Move Forgery in Digital Images", Recent Advances in Artificial Intelligence and Data Engineering. Advances in Intelligent Systems and Computing, Vol. 1386, Springer, November 2021. DOI: https://doi.org/10.1007/978-981-16-3342-3 25
- 12. Manpreet Kaur, Vishal Gupta and Ravreet Kaur, "Review of Recent Plagiarism Detection Techniques and Their Performance Comparison", in Proceedings of International Conference on Recent Trends in Machine Learning, IoT, Smart Cities and Applications. Advances in Intelligent Systems and Computing, vol 1245. Springer, 2020. DOI: https://doi.org/10.1007/978-981-15-7234-0_13
- 13. Ravreet Kaur and Gurvinder Singh, "A Survey of Genetic Algorithm based Load Balancing Techniques for Task Graph Scheduling Problem in Distributed Environment", International Journal of Scientific &

Technology Research, September, 2019. (SCOPUS). DOI: 10.35940/ijeat.F8680.088619

- 14. Ravreet Kaur and Gurvinder Singh, "Design and Analysis of Multi-Heuristic Based Solution for Task Graph Scheduling Problem", International Journal of Engineering and Advanced Technology, Vol. 8, Issue-6, August, 2019. (SCOPUS). DOI:
- 15. Abhayjeet Chahal, Deepti Gupta and Ravreet Kaur, "Congestion Aware Routing Protocol for Low Power and Lossy Networks", International Journal of Grid and Distributed Computing (IJGDC), Vol 11, No 10, pp. 51-64, November 2018. (ISSN: 2005-4262). Published by Science & Engineering Research Support Society (SERSC), Korea. (SCOPUS). DOI: http://dx.doi.org/10.14257/ijgdc.2018.11.10.05
- 16.Akansha Sarangal, Nirmal Kaur and Ravreet Kaur, "List Scheduling Algorithms Classification: An Analytical Study", International Journal of Advanced Research in Computer Science 9 (2), 385, April 2018. DOI: : http://dx.doi.org/10.26483/ijarcs.v9i2.5835
- 17. Sumandeep Kaur, Ravreet Kaur and Nirmal Kaur, "Modified Genetic Algorithm Based Solution For Task Scheduling In Cloud Computing Environment", published in Indian Journal of Computer Science and Engineering, e-ISSN: 0976-5166, Vol. 9, No. 2, April, 2018. DOI: <u>10.21817/indjcse/2018/v9i2/180902035</u>
- 18. Prabhpreet Kaur and Ravreet Kaur, "A Novel Approach Using Image Enhancement based on Genetic Algorithm", published in International Conference on Advances in Engineering and Technology, ISBN: 978-1-63248-028-6, pp. 585-590, may, 2014. DOI:
- 19. Avreen Kaur Bajwa and Ravreet Kaur, "Fast Lane Detection Using Improved Hough Transform", published in Journal of Computing Technologies, ISSN:_2278 – 3814, vol. 2, Issue 5, pp. 10-13, 2013. DOI:
- 20. Harpreet Singh and Ravreet Kaur, "Resolving Multiple Travelling Salesman Problem Using Genetic Algorithms", published in International Journal of Computer Science Engineering and Information Technology Research, ISSN: 2249 – 6831, vol. 3, no. 2, pp. 209 - 212, June 2013. DOI:
- 21. Ravreet Kaur and Sumit Kumar, "IPV6 Network Security using Snort," published in Journal of Engineering Computers and Applied Sciences, ISSN: 2319 – 5606, vol. 2, no. 8, pp. 17 - 22, August 2013. DOI:

- 22. Ramneek Kaur and Ravreet Kaur, "Scalable TDB based RSUs deployment in VANETs," published in International Journal of Innovation and Applied Studies, ISSN: 2028 9324, vol. 3, no. 4, pp. 1025–1032, August 2013. DOI:
- Ravreet Kaur and Gurvinder Singh, "Genetic Algorithm Solution for Scheduling Jobs in Multiprocessor Environment" at Annual IEEE India Conference "International Conference on Innovations in Social and Humanitarian Engineering" (INDICON 2012), ISBN: 978-1-4673-2270-6, held December 7-9, 2012 in Kochi, Kerala, India. DOI: 10.1109/INDCON.2012.6420757.
- 24. Amit Bansal and Ravreet Kaur, "Task Graph Scheduling on Multiprocessor System using genetic Algorithm" published in International Journal of Engineering Research & Technology, ISSN: 2278-0181, Volume 1, Issue 5, July – 2012. DOI:
- 25. Jasbir Singh, Gurvinder Singh and Ravreet Kaur, "Task Duplication based Scheduling on Parallel Heterogeneous System using Genetic Algorithm" at IASTED International Conference on Modelling and Simulation (MS 2012), held July 3-5, 2012 in Banff, Alberta, Canada. DOI: <u>10.2316/P.2012.783-033</u>
- 26. Ravreet Kaur, "Comparative Analysis Of BNP Scheduling Algorithms" published in International Journal of Advanced Research in Computer Science, Volume 2, No. 5, Sept-Oct 2011. DOI:

Citations of my papers:

Citations of my papers in Google Scholar: 152 h-index score: 8 i10-index: 3

Achievements and Awards:

- 1. Organized **SIH-Internal Hackathon** as **Faculty-in-charge** at UIET, Panjab University, Chandigarh, in the years 2022, 2023 and 2024.
- 2. NPTEL AICTE FDP, User Centric Computing for Human–Computer Interaction through MOOCs mode for 8 weeks (Jan Mar 2024).
- 3. Participated in AICTE recognized FDP on, "Developing Academic and Administrative Leadership", conducted by Curriculum Development Centre Department, NITTR Chandigarh from Dec 12-16, 2022 (one week).

- 4. Part of Organization Committee for Degree Award Ceremony of UIET, November 5, 2022
- 5. Section Secretary, Scientific session Engineering and Management Sciences section of CHASCON 2022 (Sept 16), Punjab University.
- 6. Participated in AICTE recognized FDP on, "Machine Learning and Predictive Analysis using Python", conducted by Computer Science and Engineering Department, NITTR Chandigarh from July 11-15, 2022 (one week).
- 7. Organized one day online workshop on, "Entrepreneurship & Innovation as Career Oppurtunity", by UIET-IIC, Panjab University, on January 6, 2022.
- 8. Attended **4-days Online workshop on, "Train the Trainers on Examination Reforms**", conducted for TEQIP 1.1 and TEQIP 1.3 institutions, from December 4 7, 2020.
- 9. Faculty advisor for CodeChef UIET PU chapter for 2020-2021
- 10. Organized **one day online webinar** on, "**Student Engaging Classrooms Online/Offline**", by Department of CSE, UIET, Panjab University, on May 15, 2020.
- 11. Participated **one-day workshop** on "**Online Virtual Labs**" conducted by Department of CSE, UIET, Panjab University, on April 29, 2020.
- 12. Participated in **one day workshop** on "**Virtual Labs**", organized by UIET, Panjab University, Chandigarh on February 18, 2020.
- 13. Attended Faculty Enablement Program on "LEX based Foundation Program", (18-25 January 2019) conducted by Infosys Limited.
- Organized, Attended and Participated in "11th Chandigarh Science Congress, CHASCON, 2017" (9-11 March, 2017) at Panjab University, Chandigarh.
- 15. Organized and Attended "**One Week Workshop on Image Processing and Machine Learning for Pattern Recognition**" (11-16 July, 2016) at UIET, Panjab University, Chandigarh.
- 4. Participated in the Faculty Development Program on "Effective Teaching" conducted by UIET, Panjab University, Chandigarh from January 9 14, 2016.
- 16. Attended "UGC Sponsored Orientation Program" (29th Nov, 2016 26th Dec, 2016) at Panjab University, Chandigarh conducted by UGC human Resource Development Centre (HRDC).
- 17. Organized as Faculty-in-charge of "The Orientation Program 2015 for Freshers Batch 2015-2016" at UIET, Panjab University, Chandigarh.

- 18. Attended "Short Term Course on Computer Network using CCNA Through ICT" (10-14 March 2014) at NITTTR, Chandigarh conducted by its Computer Science Department.
- 19. Delivered lecture as **resource person** to teacher participants of "**Refresher Course in Computer Science, Electronics & Information Technology**" (27th Nov, 2012 to 17th Dec, 2012) at UGC-Academic Staff College, Guru Nanak Dev University, Amritsar.
- 20. Attended **two-week refresher course**, "**International Workshop on Advanced data structures and algorithms**" (4-15 June 2012) at Thapar University, Patiala in Collaboration with Infosys
- 21. Qualified Graduate Aptitude Test in Engineering (GATE) 2012.
- 22. Attended two-day National workshop on the "Use and Deployment of WEB and Video Courses" (28-29 June 2011) at Indian Institute of Technology, Delhi.
- 23. Selected in **CSC India**, through campus placement in December 2008.
- 24. Selected as **Assistant Systems Engineer Trainee** in **Tata Consultancy Services** through campus placement in August 2008.

Sr. No.	NAME	Degree Award Year	ТОРІС
1	Amit Bansal, GNDU	2013	Task Graph Scheduling on Multiprocessor System using genetic Algorithm
2	Ramneek Kaur, GNDU	2014	Scalable TDB based RSUs deployment in VANETs
3	Sumit Kumar, GNDU	2014	IPV6 Network Security using Snort
4	Harpreet Singh, GNDU	2014	Resolving Multiple Travelling Salesman Problem Using Genetic Algorithms
5	Avreen Kaur Bajwa, GNDU	2014	Fast Lane Detection Using Improved Hough Transform
6	Sumandeep Kaur, PU	2018	Modified Genetic Algorithm based solution for task scheduling in cloud Computing Environment
7	Akansha Sarangal, PU	2019	Energy Aware Scheduling Algorithm in Heterogeneous Scheduling Algorithm
8	Abhayjeet Chahal, PU	2018	Congestion Aware Routing Protocol for Low Power and Lossy Networks
9	Jatin Gupta, PU	2021	Denoising of Magnetic

ME Student Thesis: Completed:10 ; In-Progress: 3

			resonance imaging using Bayes shrinkage based fused wavelet transform
10	Vaneet Kaur, PU	2021	A Fast Block-Based Technique to detect Copy – Move Forgery in Digital Images
11	Manpreet Kaur, PU	2021	A Novel Semantic Based Extrinsic Plagiarism Detection for English Text Documents
12	Shrutika Chawla, PU	2022	A Hybrid Approach to Detect Short – Text Plagiarism
13	Junaid, PU	2022	Stock Price Prediction using Different Combinations of Sentiment Scores and MLP- Regressor
14	Namrata, PU	2022	Prediction of Lung Cancer Survival using Machine Learning Techniques
15	Kritika, PU	2022	Blockchain based system for Traceability of Counterfeit Medicine
16	Maya Thapa, PU	2023	An Explainable Deep- learning-based Multi-label Image Classification For Chest X-rays
17	Hardik Lath, PU	2024 (expected)	-
18	Banipreet Singh, PU	2025 (expected)	-

Dr. Ravreet Kaur