



Department of Computer Science
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DR. SAVITA

Personal Details

FULL NAME:	DR. SAVITA
DEPARTMENT:	Computer Science
FATHER'S NAME:	SH. D.P. SINGH
MARITAL STATUS:	Married

Academic Qualifications

- Ph.D. (Computer Science and Technology) from Jawaharlal Nehru University, New Delhi in August 2020. Thesis Title: A Social Feature Based Routing in Delay Tolerant Networks.
Supervisor Name: Prof. D. K. Lobiyal
- M.Tech. (Computer Science and Technology) from Jawaharlal Nehru University, New Delhi in 2014. Dissertation Title: Inter-contact Routing algorithm using Location Information in Delay Tolerant Networks.
- B. Tech. (Information Technology) from I.E.T. Lucknow, in 2004.
- UGC NET Qualified in June 2015
- GATE 2006- 350 SCORE, 686 RANK.

Academic Experience

- Presently working as **Assistant Professor** in Department of Computer Science at Kanya Gurukula Dehradun, Dehradun (Gurukula Kangri (Deemed to be University), Haridwar) since 02 Nov 2018.
- Worked as **Assistant Professor** in Department of Information Technology at Meerut Institute of Engg. & Technology (MIET), Meerut from 24 July 2017 to 01 Nov 2018.
- Worked as **Sr. Lecturer** in Department of Information Technology at Meerut Institute of Engg. & Technology (MIET), Meerut from 16 Sep 2008 to 29 July 2012.
- Worked as **Lecturer** in Department of Information Technology at Meerut Institute of Engg. & Technology (MIET), Meerut from 18 Jan. 2007 to 15 Sep 2008.

Research Publications

Project Grant

1. Renu Shukla (PI) & **Savita** (CO-PI) (22 September 2023). Reviving ancient wisdom: a study of ancient water science techniques and applicability in contemporary Dehradun . Uttarakhand state council for science & technology (UCOST), Dehradun.

Journal Publications

- **Savita**, & Verma, A. (2026). *A Comprehensive Review of Energy Efficient Routing Protocols in Delay Tolerant Networks: Categorization, Insights, Comparative and Empirical Evaluation*. Wireless Personal Communications, 146(7), 1–46. <https://doi.org/10.1007/s11277-026-12171-5>. Publisher: Springer Nature. (**SCI, Web of Science, Scopus**). **Impact Factor: 1.9**
- **Savita**, Shukla, R., & Rawat, M. S. (2026). *An environmental survey of water heritage and source sustainability along Maldevta Route in Dehradun*. International Journal of Research and Innovation in Social Science (IJRISS), 10(6), 6788–6796. <https://doi.org/10.47772/IJRISS.2026.100600469>
- **Savita**, Shukla, R., & Rawat, M. S. (2026). *Machine learning for sustainable water resource management: A comprehensive review*. International Journal of Innovative Research in Computer and Communication Engineering (IJRCCE), 14(3). <https://doi.org/10.15680/IJRCCE.2026.1403075>
- **Savita**, & Verma, A. (2026). *A structured review of time-centric approaches in delay-tolerant network routing: Categorization, comparative evaluation, and insights*. International Journal of Communication Systems, 39(7), e70468. <https://doi.org/10.1002/dac.70468> Publisher: **Wiley**. (**SCI, Web of Science, Scopus**) **Impact Factor: 1.8**
- **Savita**, Kumar, N., & Siwch, A. (2026). *A similarity measure for intuitionistic fuzzy sets with improved clustering accuracy and applications in pattern recognition*. Franklin Open, 14, 100518. <https://doi.org/10.1016/j.fraope.2026.100518> Publisher: **Elsevier**. (**Scopus**)
- Verma, A., Agarwal, V., Shubhangi, Rizvi, S., & **Savita**. (2026). *A collective intelligence-based project team formation using bio-inspired techniques*. International Journal of Business Intelligence and Data Mining. <https://doi.org/10.1504/IJBIDM.2026.10074392> Publisher: **Inderscience**. (**Scopus**)
- **Savita**, & Verma, A. (2025). *Delay tolerant networks: A study of applications, challenges and routing algorithms*. Journal of Dalian University of Technology (JDTU), 32(9), 308–320. (**Scopus**)
- **Savita**, & Shukla, R. (2025). *A field-based assessment of natural water resources in Dehradun: Availability, depletion, and management concerns*. Journal of Dalian University of Technology (JDTU), 32(7). (**Scopus**)
- Shukla, R., & **Savita**. (2024). *A survey and analysis of natural water sources on the proposed Song Dam route in Dehradun*. Solovyov Studies (Solov'evskie Issledovaniya ISPU), 72(8). (**Scopus**)
- Verma, A., & **Savita**. (2024). *A comprehensive survey of the design of delay tolerant networks: Architecture, bundle protocol specifications and naming schemes*. Solovyov Studies (Solov'evskie Issledovaniya ISPU), 72(8). (**Scopus**)

- **Savita, Kumar, N., & Siwach, A. (2024).** *Fuzzy clustering based on distance metric under intuitionistic fuzzy environment.* Granular Computing, 9, 20. <https://doi.org/10.1007/s41066-023-00446-2> Publisher: **Springer Nature.** (*Web of Science, Scopus*)
- **Savita, & Verma, A. (2023).** *Buffer Management Techniques in Delay Tolerant Networks: A Comprehensive Survey.* Recent Advances in Computer Science and Communications, 16(8), Article e170823219888. <https://doi.org/10.2174/2666255816666230817101831>. Publisher: Bentham Science Publishers. (*Scopus*)
- **Savita. (2023).** *A review of pregnant women's present circumstances to promote welfare.* Shodh Disha, 62, 90–94. Publisher: Hindi Sahitya Niketan (*UGC care listed*)
- **Savita, & Verma, A. (2022).** *Eigen vector centrality (EVC) routing for delay tolerant networks: A time-associated matrix-based approach.* Wireless Personal Communications, 128, 1–17. <https://doi.org/10.1007/s11277-022-09996-1> Publisher: **Springer Nature.** (*SCI, Springer*) **Impact Factor: 2.017**
- **इरशाद, त., & स वता. (2022).** *आर्टि फ शयल इंटे लर्जेस सीमार्ये ; भ वष्य और चुनौतियां .* शोध दिशा, 59, 229–234. Publisher: हिन्दी साहित्य निकेतन. (*UGC care listed*)
- **Verma, A., Savita, & Kumar, S. (2021).** *Routing protocols in delay tolerant networks: Comparative and empirical analysis.* Wireless Personal Communications. <https://doi.org/10.1007/s11277-020-08032-4> Publisher: **Springer Nature.** (*SCI, Springer*) **Impact Factor: 1.671.**
- **Savita, & Lobiyal, D. K. (2020).** *Inter-contact delay and location information-based routing (ICDLIR) with adaptive threshold buffer management for delay tolerant networks.* International Journal of Information and Communication Technology (IJICT). <https://doi.org/10.1504/IJICT.2020.110786> Publisher: **Inderscience.** (*Scopus*)
- **Savita, & Lobiyal, D. K. (2019).** *Location-based contact time energy-efficient routing (LCTEE) approach for delay tolerant networks.* Wireless Personal Communications. <https://doi.org/10.1007/s11277-019-06543-3> Publisher: **Springer Nature.** (*SCI, Springer*) **Impact Factor: 1.061.**
- **Savita, & Lobiyal, D. K. (2019).** *Multicopy energy-aware distance and inter-contact delay routing (EDICDR) approach for delay tolerant networks.* International Journal of Computer Network and Information Security (IJCNIS), 11(5), 36–42. <https://doi.org/10.5815/ijcnis.2019.05.05> Publisher: **MECS Press.** (*Scopus*)

• **Patent Publications**

- **Savita, Ankita Verma, & Jyoti Singh Kirar. (2021).** *Machine Learning Assisted Big Data Analytic System.* Indian Patent Application No. 202111037719. **Office of the Controller General of Patents, Designs and Trade Marks,** Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India.
- **Pratishtha Verma, Ankita Verma, Jyoti Singh Kirar, & Savita. (2022).** *Machine Learning Based Confidence Tracking Device of the Employee.* Indian Design Application No. 378936-001. **Office of the Controller General of Patents, Designs and Trade Marks,** Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India.

Conference Publications/ Book Chapters

- Siwch, A. & **Savita**. (2025). *Enhanced Similarity Measure for Intuitionistic Fuzzy Sets to Improve Big Data Clustering Accuracy*. International Conference on Automation for Sustainable Future, Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India, 7–8 March 2025.
- Pathak, N. & **Savita**. (2025). *A Comparative Study on Community Detection in Social Networks: A Systematic Literature Review*. International Conference on Automation for Sustainable Future, Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India, 7–8 March 2025.
- **Savita**, Singh, D., Verma, A. & Singh, N. (2025). *Advances in Autonomous Navigation through Intelligent Technologies, Concepts and Algorithms of Mobile Devices*. In AAP *Advances in Artificial Intelligence and Robotics*. ISBN: 978-1774917008. (Book Chapter). <https://doi.org/10.1201/9781003533054-8>
- Verma, A., **Savita** & Gupta, S. (2023). *A Fuzzified Approach for Overlapping Community Detection in Social Networks Based on Nodes Similarity*. Proceedings of the Fifteenth International Conference on Contemporary Computing (IC3 2023), pp. 706–710. <https://doi.org/10.1145/3607947.3608086>.
- **Savita** & Verma, A. (2023). *Social Feature-Based Routing Methods in Delay Tolerant Networks: Assessment of Current Research*. 2023 Second International Conference on Informatics (ICI), Noida, India, pp. 1–6. <https://doi.org/10.1109/ICI60088.2023.10421023>.
- Kumari, K., Chauhan, S., Singh, S. & **Savita**. (2023). *Recent Research on Scholarship Programs: Obstacles and Opportunities*. International Conference on Advanced Emerging Trends in Engineering & Pharmaceutical Science (AETEPS-2023), BIT Meerut. ISBN: 978-935782-960-1.
- Chauhan, B., Perna, Rajput, M. & **Savita**. (2023). *Current Study on Pregnant Women's Health: Challenges and Prospects*. International Conference on Advanced Emerging Trends in Engineering & Pharmaceutical Science (AETEPS-2023), BIT Meerut. ISBN: 978-935782-960-1.
- **Savita**. (2022). *A Study on Current Scenario of E-Waste and E-Waste Management in India*. National Conference on E-Waste Management: Challenges and Opportunities, Gurukula Kangri (Deemed to be University), Haridwar. ISBN: 978-93-91778-04-0.
- **Savita**. (2022). *E-Squander Management in India: Issues and Challenges*. National Conference on E-Waste Management: Challenges and Opportunities, Gurukula Kangri (Deemed to be University), Haridwar. ISBN: 978-93-91778-04-0.
- **Savita**. (2017). *Energy Efficient Delay Tolerant Routing Protocols: A Comparative Study*. IEEE International Conference on Computing, Communication and Automation (ICCCA 2017), Galgotias University, Greater Noida, India, 5–6 May 2017. <https://doi.org/10.1109/CCAA.2017.8229871>
- **Savita** & Lobiyal, D. K. (2015). *Location Information and Inter-Contact Based Routing Approach for Delay Tolerant Networks*. International Conference on Recent Trends in Computing (ICRTC-2015), SRM University, NCR Campus, Ghaziabad, India, 12–13 March 2015. <https://doi.org/10.1016/j.procs.2015.07.452>
- Srivastava, D., Jain, S. & **Savita**. (2007). *Clustering Techniques in Data Mining: Issues and Prospects*. National Conference on Emerging Technologies in Computer Science (ETCS-2007), MIET, Meerut, 22–23 September 2007.
- **Savita**, Jain, S. & Sachan, A. (2008). *Encryption Technologies against E-Fraud for Consumer Welfare*. National Conference on Consumer Protection & Consumer Welfare, MIET, Meerut, 7–8 March 2008.

- Bhardwaj, A., **Savita** & Singh, A. (2008). *E-Commerce and Consumer Concerns*. National Conference on *Consumer Protection & Consumer Welfare*, MIET, Meerut, 7–8 March 2008.

Academic and Professional Activities

- Presented a paper titled “*Enhanced Epidemic Protocol (EER) for Delay Tolerant Networks*” at the International Conference on Automation for Sustainable Future 2.0 (ASF 2026), organized by the Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India, 27–28 February 2026.
- Presented a paper titled “*A Review on Classification of Data Clustering Algorithms*” at the International Conference on Automation for Sustainable Future 2.0 (ASF 2026), organized by the Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India, 27–28 February 2026.
- Delivered an invited talk on “*Hands-on Session on Popular AI Tools*” as a Resource Person at Government Polytechnic, Shahbad, Rampur, 12 January 2026.
- Delivered an expert talk on “*Opportunistic Networks*” at the 3rd International Conference on Automation and Computation (AUTOCOM 2025), organized by the Department of Computer Science, Graphic Era Hill University, Dehradun, 4–6 March 2025.
- Acted as a Session Chair at the 3rd International Conference on Automation and Computation (AUTOCOM 2025), organized by the Department of Computer Science, Graphic Era Hill University, Dehradun, 4–6 March 2025.
- Acted as a Session Chair at the International Conference on Cybercom and Computational (CYBERCOM 2024), organized by the Department of Computer Science, Graphic Era Hill University, Dehradun, 15–16 November 2024.
- Delivered an expert talk on “*Delay Tolerant Networks*” at the International Conference on Cybercom and Computational (CYBERCOM 2024), organized by the Department of Computer Science, Graphic Era Hill University, Dehradun, 15–16 November 2024.
- Acted as the Convener of the webinar “*Essentials of Data Analysis*”, organized by the Department of Computer Science, Kanya Gurukul Campus, Dehradun, 24 August 2024.
- Organized an expert lecture on “*Water Conservation and Technological Options for Societal Development*” delivered by Dr. M. Muruganandam (Fulbright Scholar, Principal Scientist and Head, PME & KM Unit, ICAR) and Ms. Seema Dungarakoti (Secretary/Civil Judge, Senior Division, District Legal Services Authority, Dehradun).
- Delivered a lecture on “*Data Analytics Using Excel*” as a Resource Person at Government Polytechnic, Shahbad, Rampur, 6 June 2024.
- Acted as the Convener of an expert lecture on “*Machine Learning & Data Science Using Python*” organized by the Department of Computer Science, Kanya Gurukul Campus, Dehradun, delivered by Dr. Jyoti Singh Kirar (JNU, New Delhi), 29 December 2023.
- Acted as the Co-Convener of the one-week “*Python Hands-on Workshop*”, organized by the Department of Computer Science, Kanya Gurukul Campus, Dehradun, 21–26 August 2023.
- Acted as the Co-Convener of the webinar “*Sangeet Mein Rozgaar ki Sambhavnayein*”, organized by the Department of Music, Kanya Gurukul Campus, Dehradun, 7 April 2023.
- Acted as the Co-Convener of the one-week workshop “*Python Workshop: Introduction and Beyond*”, organized by the Department of Computer Science, Kanya Gurukul Campus, Dehradun, in collaboration with Dream Tech, Dehradun, 31 October–6 November 2022.

- Acted as a Session Chair at the International Conference on “*Advanced Emerging Trends in Engineering & Pharmaceutical Science (AETEPS 2023)*”, BIT Meerut, 7–8 April 2023.
- Served as an Organizing Committee Member for the webinar “*Celebrating Womanhood: Voices of Women*”, 8 March 2022.
- Delivered a lecture on “*Routing in Delay Tolerant Networks*” as a Resource Person for the DST CIMS BHU ACM Student Chapter, Banaras Hindu University, Varanasi, 17 August 2021.
- Delivered lectures as a Resource Person in the “*Excel @ Excel*” workshop at Kanya Gurukul Campus, Dehradun, 15–21 September 2021.
- Acted as the Co-Convener of the seven-day “*Excel @ Excel*” workshop at Kanya Gurukul Campus, Dehradun, 15–21 September 2021.
- Acted as the Convener of the National Webinar “*Nature Inspired Computing: Algorithms and Applications*”, organized by the Department of Computer Science, Gurukula Kangri (Deemed to be University), Haridwar, 16 February 2022.
- Served as an Organizing Committee Member for the National Webinar on the occasion of International Women’s Day, organized by the Department of Ancient Indian History, Culture and Archaeology, Kanya Gurukul Campus, Dehradun, 8 March 2022.
- Served as an Organizing Committee Member for the National Conference “*E-Waste Management: Challenges & Opportunities*”, organized by the Department of Computer Science, Gurukula Kangri (Deemed to be University), Haridwar, 24–25 March 2022.
- Served as an Organizing Committee Member for the two-day workshop “*WordPress and Search Engine Optimization (SEO)*”, organized by the Department of Computer Science, Gurukula Kangri (Deemed to be University), Haridwar, 15–16 February 2019.

Refresher Course/FDP/Webinar/Workshop/Short Term Course Attended

- Attended the UGC-sponsored Two-Week Refresher Course on *Research Methodology and Data Analysis* from 22 December 2025 to 5 January 2026 and obtained A+ Grade under the Malaviya Mission Teacher Training Centre, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat.
- Attended the UGC-sponsored One-Week Short-Term Programme on *Quantitative and Qualitative Research Methodology (Online)* from 28 July to 2 August 2025 and obtained A Grade under the UGC-Malaviya Mission Teacher Training Centre, Central University of Haryana, Mahendragarh, Haryana.
- Attended the UGC-sponsored One-Week Short-Term Course on *AI, Machine Learning and Cyber Security (Online)* from 7 to 14 November 2025 and obtained A+ Grade under the UGC-Malaviya Mission Teacher Training Centre, Punjabi University, Patiala, Punjab.
- Attended the Online Faculty Development Programme on *Next-Gen AI: Cutting-Edge Trends in Machine Learning and Generative AI*, organized by the Department of Computer Science, Jaypee Institute of Information Technology, Noida, Uttar Pradesh, from 30 June to 5 July 2025.
- Attended the UGC-sponsored Two-Week Interdisciplinary Refresher Course on *Use of Artificial Intelligence in Higher Education* from 9 to 21 December 2024 and obtained A+ Grade under the Malaviya Mission Teacher Training Centre, Central University of Haryana, Mahendragarh, Haryana.

- Attended the Online Workshop on *Quantum Information and Advanced Computing: Modern Edge with Industrial Alignments*, organized by the Amity School of Engineering and Technology, 1–3 August 2024.
- Attended the Online Faculty Development Programme on *Autonomous AI for Sustainable Development*, organized by the Department of Computer Science, Jaypee Institute of Information Technology, Noida, Uttar Pradesh, 3–8 June 2024.
- Attended the Online Short-Term Course on *Machine Learning and its Applications in IoT, Computer Vision and Cloud Computing (MICC-2023)*, organized by the Department of Computer Science and Engineering, National Institute of Technology Jamshedpur, 10–14 July 2023.
- Attended the One-Week Online Faculty Development Programme on *ML/DL for Data Science and Analytics using Python*, organized by Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, 15–19 February 2023.
- Attended the Online AICTE ATAL Faculty Development Programme on *Computational Foundation for Data Science*, organized by Banaras Hindu University, Varanasi, 26–30 July 2021. (ATAL No. ATAL/2021/1625406161).
- Attended the Webinar on *LaTeX for Report Writing*, organized by the DST CIMS BHU ACM Student Chapter, Banaras Hindu University, Varanasi, 26 June 2021.
- Attended the Two-Week Interdisciplinary Refresher Course/Faculty Development Programme on *Advanced Research Methodology: Tools and Techniques* from 30 January to 14 February 2021 and obtained A+ Grade under the aegis of the Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.
- Attended the Online AICTE ATAL Faculty Development Programme on *Cloud Technology*, organized by INFLIBNET Centre, 9–13 November 2020. (ATAL No. ATAL/2020/1604472518).
- Attended the Webinar on *Software Defined Networking (SDN)*, organized by Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi, 31 October 2020.
- Attended the Online Training Programme on *Online Education and Teaching Methodologies*, organized by Gurukula Kangri (Deemed to be University), Haridwar, 7–10 August 2020.
- Attended the Online Faculty Development Programme on *Machine Learning and Applications*, organized by Sagar Institute of Research and Technology, Bhopal, 18–23 May 2020.
- Successfully completed the *Python Basics* online course offered by the University of Michigan through Coursera, 2020.
- Attended the UGC-Sponsored Orientation Programme at Jawaharlal Nehru University, New Delhi, 6–25 January 2020.
- Awarded the Gold Medal in the NPTEL SWAYAM course on *Database Management System* with a score of 91%, 2019.
- Attended the IEEE International Conference on Computing, Communication and Automation (ICCCA 2017), Galgotias University, Greater Noida, Uttar Pradesh, 5–6 May 2017.
- Attended the International Conference on Recent Trends in Computing (ICRTC 2015), SRM University, NCR Campus, Ghaziabad, 12–13 March 2015.
- Attended the AICTE-Sponsored Online Short-Term Course on *NBA Accreditation*, organized by NITTTR, Chandigarh, 10–14 March 2016.
- Attended the Engineering Faculty Workshop under *Wipro Mission 10X*, organized at MIT, Meerut, 22–24 December 2014.

- Attended the AICTE-Sponsored Online Short-Term Course on *Computer Network Using CCNA through ICT*, organized by NITTTR, Chandigarh, 10–14 March 2014.
- Attended the National Seminar on *TQM in Pedagogy (TQMP)*, 27 May 2008.
- Attended the National Workshop on *Digital Image Processing*, BIT Muzaffarnagar, 15–16 November 2008.
- Attended the National Conference on *Emerging Technologies in Computer Science (ETCS-2007)*, MIET, Meerut, 22–23 September 2007.

Administrative Responsibilities/Member of academic bodies

- Member, IEEE.
- Member, Association for Computing Machinery (ACM).
- IQAC Coordinator, Kanya Gurukul Campus, Dehradun.
- Member, Board of Studies (BoS).
- Member, Career Planning Academy, Gurukula Kangri (Deemed to be University), Haridwar.
- Member, National Institutional Ranking Framework (NIRF) Committee, Gurukula Kangri (Deemed to be University), Haridwar.
- Member, MCA Admission Committee, Kanya Gurukul Campus, Dehradun.
- Member, NAAC Criterion III Committee.
- Member, Research Monitoring and Coordination Committee.
- Member, Departmental Research Committee (DRC).
- Member, SC/ST Scholarship Committee.

(SAVITA)