Curricum Vitae

Dr. Tripti Rathee

Assistant Professor | Head of Department (IT – 2nd Shift)



Qualifications : PhD.

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Area of Interest/Specialization: Blockchain, Identity and Access Management, Information Security, Artificial Intelligence

Experience : 15 years

Key Publications

1. T. Rathee and P. Singh, A systematic literature mapping on secure identity management using blockchain technology, Journal of King Saud University – Computer and Information Sciences, https://doi.org/10.1016/j.jksuci.2021.03.005 **[SCIE Journal, IF-13]**

2. Rathee, ., Singh, P. Secure data sharing using Merkle hash digest based blockchain identity management. *Peer-to-Peer Netw. Appl.* (2021). https://doi.org/10.1007/s12083-021-01212-4 **[SCIE JOURNAL, IF 3.4]**

3. Rathee, T. and Singh, P.(xxxx) 'A secure identity and access management system for decentralizing user data using blockchain', *Int. J. Computational Vision and Robotics*, Vol. X,No. Y, pp.xxx–xxx**. [SCOPUS Journal]**

4. Sharma, V., Sinha, A., Alkhayyat, A. *et al.* FL-XGBTC: federated learning inspired with XG-boost tuned classifier for YouTube spam content detection. *Int J Syst Assur Eng Manag* 15, 4923–4946 (2024). https://doi.org/10.1007/s13198-024-02502-9

5. Singh, U., Singh, S., Rathee, T., & Vaish, M. (2024). Customer retention modeling over the OTT platform using machine learning. *Indian Journal of Science and Technology*, *17*(42), 4365-4371.

6. Tomer, M., Rathee, T., Singh, H., Mahadevan, N., Singh, G., & Rao, B. K. (2024). A Novel Approach of Stock Price Forecast Using Deep Learning Practices. *International Journal of Intelligent Systems and Applications in Engineering*, *12*(15s), 594-603.

7. Jain, D., Tomer, M., Shyla *et al.* A lightweight transformer-enhanced YOLOv8 framework for robust underwater object detection and classification. *SIViP* **20**, 530 (2026). https://doi.org/10.1007/s11760-026-05598-7

Papers presented in Conferences

1. Rathee, T., & Singh, P. (2021, April). MedSecureChain: Applying Blockchain for Delegated Access in Health Care. In *New Approaches for Multidimensional Signal Processing: Proceedings of International Workshop, NAMSP 2020* (Vol. 216, p. 153). Springer Nature.**[International conference, Scopus indexed]**

2. I. K. Chadha, A. Gupta, S. Sarkar, M. Tomer and T. Rathee, "Performance Evaluation of Open-Source LLMs for Text-to-SQL Conversion in Healthcare Data," *2025 International Conference on Pervasive Computational Technologies (ICPCT)*, Greater Noida, India, 2025, pp. 606-609, doi: 10.1109/ICPCT64145.2025.10941238.
3. Sharma, B., Rathee, T., Tomer, M., Singh, P. (2024). Handwritten Mathematic Expression Conversion to Docx. In: Kountchev, R., Mironov, R., Draganov, I., Kountcheva, R., Nakamatsu, K. (eds) New Approaches for Multidimensional Signal Processing. NAMSP 2023. Smart Innovation, Systems and Technologies, vol 385. Springer, Singapore. https://doi.org/10.1007/978-981-97-0109-4_17

Patent/Copyright

1. Australian Patent Granted on “A Blockchain based system for personal data verification”

Book Chapter/Books published

1. Rathee T., Singh P. (2022) A Self-Sovereign Identity Management System Using Blockchain. In: *Khanna K., Estrela V.V., Rodrigues J.J.P.C. (eds) Cyber Security and Digital Forensics.* Lecture Notes on Data Engineering and Communications Technologies, vol 73. Springer, Singapore. https://doi.org/10.1007/978-981-16-3961-6_31
2. Rathee, T., Tomer, M., Chadha, I.K. (2025). Cloud Computing Applications in Digital Health: Challenges Related to Privacy and Security. In: Mohanty, S.N., Satpathy, S., Cheng, X., Pani, S.K. (eds) Explainable IoT Applications: A Demystification. Information Systems

Engineering and Management, vol 21. Springer, Cham. https://doi.org/10.1007/978-3-031-74885-1_5

Major Duties and Responsibilities handled at MSIT

1. **Technical review Committee member** in the National Conference on Recent Trends in Climate Change, Energy and Sustainability held on 11th-12th November, 2024 at Maharaja Surajmal Institute of Technology, Delhi.
2. **Finance Committee member** in the International Conference on Artificial intelligence and Applications held on 26th -27th March 2025 at MSIT.
3. **Configured and integrated Microsoft Teams** to support remote teaching and learning for MSIT faculty and students during the COVID-19 outbreak.
4. Successfully Conducted **mock placement** for Batch 2021-25 and organized a Farewell to the batch 2020-24.
5. Software Renewal Convener since Aug 2023
6. Annual Maintenance Contract (AMC) Team member since Aug 2023
7. Member of Skill Development Cell since Aug 2024
8. Member of Industry Institute Interaction Cell (IIIC) since Aug 2023
9. Team Member of Intellectual property rights (IPR) cell from Aug 2021 to Aug 2023
10. Firewall Convener from Aug 2016 to March 2017
11. ISO Incharge from Aug 2015 to March 2017
12. NBA Team Member since Aug 2016
13. Time table Incharge from Jan 2012 to Aug 2012
14. Website Team member from Aug 2011 to December 2012

Responsibilities handled at Departmental Level

- Class Proctor
- Class Mentor
- Lab Incharge
- Project Incharge
- Summer Training Incharge
- Data Maintenance Incharge

Achievements

1. **Keynote Speaker** during 2nd International Conference on Communication, Computer Sciences and Engineering held during 19th-21st march 2025 at Amity University Greater Noida.
2. **Session Chair** at 2nd International Conference on Communication, Computer Sciences and Engineering held during 19th-21st march 2025 at Amity University Greater Noida.
3. **Reviewer** in the International conference on Computational Intelligence and Computing Applications (ICCICA – 2024) organized by Department of Computer Science &Engineering, technically co-sponsored by IEEE Delhi Section during 23rd 24th May, 2024 at Panipat Institute of Engineering & Technology, Samalkha, Panipat, Haryana, India.

4. Delivered an **expert lecture on "Blockchain in Industry 5.0: Identity Management**" during the One-Week Faculty Development Program (FDP) on "Industry 5.0 and Beyond: Transforming Skills for a Smart and Sustainable Future", organized by the Department of Information Technology, Bhagwan Parshuram Institute of Technology (BPIT), from May 21 to May 27, 2025.
5. **Organized Faculty Development Programme** on "Recent Advancement in Machine Learning and Artificial Inetlligence (RAMLAI'23)" held at Maharaja Surajmal Institute of Technology during 6-10 February 2023.
6. **Received Research Excellence** award for publishing quality research for the year 2022 from SMES on the Annual Day Celebration.
7. Successfully prepared and set the question paper for the subject Design and Analysis of Algorithms as per the academic guidelines of GGSIPU.
8. Successfully completed 1 week course on Artificial Intelligence and Machine Learning organized by Electronics & ICT academy in collaboration with IIT, Guwahati and secured Grade A