

FACULTY PROFILE



Name: Ms. Barkha Samania

Designation: Assistant Professor

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Professional Qualification:

- SANSKRITI UNIVERSITY, MATHURA
2023 – Pursuing
Doctor of Philosophy
- RAM CHAMELI CHADDHA VISHVAS GIRLS COLLEGE (Affiliated to AKTU)
2018 – 2020
Master of Computer Applications
- INSTITUTE OF MANAGEMENT AND RESEARCH (Affiliated to CCSU)
2015 – 2018
Bachelor of Computer Applications

Publications (Journals & Conferences):

- Book Chapters
 - Samania, B. (2024). *Ethical and Legal Implications of AI in Cybersecurity*. Taylor & Francis (Scopus Indexed). ISBN: 10.4018/979-8-3693-7540-2.
 - Samania, B. (2025). *Harnessing predictive analytics for disease diagnosis and risk assessment: Transforming preventive healthcare with AI*. In [Editor(s)]. IGI Global. ISBN: 979-8-3373-3311-3. (Scopus Indexed). September 2025
 - Samania, B. (2025). *AI-driven clinical decision support systems enhancing decision making in modern healthcare*. In [Editor(s)]. IGI Global. ISBN: 979-8-3373-3311-3. (Scopus Indexed). September 2025
- Patents
 - Samania, B. (2024). *Cloudshield Sentry: Advanced Intrusion Detection for Secure Cloud Environment*. Patent No: 202411009651. Filed on: 16th February 2024.

- Samania, B. (2025). *Smart HR Interface for Resume Analysis and Ranking*. Patent No: 6439644. Filed on: 6th May 2025
- Research papers
 - Samania, B. (2025). Optic DRL: Integrating optical networks with multi-objective optimization and deep reinforcement learning for MEC resource allocation. *Journal of Metallurgical and Materials Engineering*, 31(3), 459–474. (SCI Indexed).
 - Samania, B. (2025). Enhancing cloud computing performance: A novel approach for optimizing energy efficiency through AI-based load balancing algorithms. In *Proceedings of the International Conference on Intelligent Computing and Knowledge Extraction*. IEEE. <https://doi.org/10.1109/ICICKE65317.2025.11136754> (Scopus Indexed, September 2025)
 - Samania, B. (2025). Securing electric vehicles: A cybersecurity framework for threat detection and mitigation. In *Proceedings of the International Conference on Intelligent Communication Networks and Computational Techniques*. IEEE. <https://doi.org/10.1109/ICICNCT66124.2025.11232741> (Scopus Indexed, November 2025).
 - Ms. Barkha Samania. (2026). Energy-efficient protocols and AI-driven optimization for sustainable green networking in 6G communication systems. In *1st International Conference on Artificial Intelligence & Machine Learning in Communication and Power Systems (AIMLCPS-2026)*, March 2026.

Awards and Achievements:

- Award for Distinguished Educators presented by “Commission for Other Backward Classes (Govt. of NCT of Delhi). (8th June 2024)
- Women of Worth Award 2026 presented by SRM Institute of Science and Technology-Delhi/NCR Campus on Women’s Day Celebration. (14th March 2026)

Workshops/Seminars/FDPs:

- Certified for Participated in Two-day FDP: CSTDE-2022 in association with I.Q.A.C (25th February 2022 – 26th February 2022)
- Certified for Participated in IP Awareness/Training program under the “National Intellectual Property Awareness Mission (NIPAM) Organized by Intellectual Property Office, India (27th April 2023)
- Certified for Participation in Professional Development Workshop on Digital Creativity Skills as a part of Adobe Academic Essentials program Organized by Adobe Express. (31st March 2023)
- Attended the inaugural of 11th International Conference on Recent Trends in Computing (ICRTC 2023) in association with SPRINGER. (2nd June 2023)

- Certification for participation in Two weeks National Level Faculty Development Program on “INNOVATIVE TEACHING STRATEGIES AND TOOLS IN THE DIGITAL AGE” in collaboration with Institutions Innovation Council (IIC GGI Ludhiana)
(20th May 2023 – 2nd June 2023)
- Certification for participation in Five days National level Workshop on MOODLE LMS Organized by ESSGEE DIGISKILLS by prof. Sugandha Gupta.
(25th May 2023 – 31st May 2023)
- Certificate of Participation in “Digital India Quiz on Stay Safe Online” Organized by MyGov.
(20th June 2023)
- Certificate of Participation in STAY SAFE ONLINE (SSO) CAMPAIGN on “Social Engineering Attacks and Security Measures” under India’s G20 Presidency led by Ministry of Electronics & Information Technology (MietY), Government of India and implemented by C-DAC, Hyderabad as part of ISEA Project Phase-II.
(16th June 2023 – 31st July 2023)
- Certificate of Participation in Webinar on Exploring “Google Bard AI” for Teachers Organized by Scrollwell Academy.
(20th June 2023)
- Certificate of Participation in “16 Days International Online Faculty Development Program on Teaching, Learning and Assessing in 2030” Organized by SRM Institute of Science and Technology, Ramapuram Campus, Chennai.
(6th June 2023 – 23rd June 2023)
- Certificate of Participation in online “FACULTY DEVELOPMENT PROGRAM” on the topic online Hands-on session on “Performance Analysis of Wireless Communication System”.
(26th June 2023 – 1st July 2023)
- Certificate of Participation in online “SKILL DEVELOPMENT AND TRAINING PROGRAM” on the topic “Human Values and Professional Ethics”.
(2nd July 2023)
- Certificate of Participation in AICTE recognized One Week FACULTY DEVELOPMENT PROGRAM on “Technology Integration and NEP 2020” conducted by SRMIST, Delhi-NCR Campus, Ghaziabad in collaboration with National Institute of Technical Teachers Training and Research, Chandigarh.
(12th June 2023 – 16th June 2023)
- Certificate of Participation in Short-Term Professional Development Program on “IMPLEMENTATION OF NEP-2020 FOR UNIVERSITY AND COLLEGE TEACHERS” under Madan Mohan Malaviya National Mission on Teachers and Training from IGNOU.
(12th June 2023 – 20th June 2023)
- Certificate of participation in Six Days Faculty Development Program (FDP) on “Advance MATLAB Programming with Applications in Emerging Technologies” Organized by SRM Institute of Science and Technology, Delhi NCR Campus in association with IEEE Student Branch (STB08411).
(12th June 2023 – 17th June 2023)
- Certificate of participation in 5- Days Faculty Development Program (FDP) on “Intellectual Property Rights in the age of AI, ML, Cyber Security and Blockchain” Organized by Department of Computer Applications at Mangalmay Institute of Management & Technology, Gr. Noida.
(24th June 2024 – 28th June 2024)

- Certificate of participation in Three Days Face to Face Faculty Development Program (FDP) on “Inculcating Universal Human Values in Technical Education” Organized by AICTE at SRM Institute of Science and Technology, Delhi NCR Campus.
(10th March 2025 – 12th March 2025)
- Certificate of participation in AICTE recognized Faculty Development Program (FDP) on “Mastering Cloud Computing Essentials with AWS” Organized by CSE Dept. at SRM Institute of Science and Technology, Delhi NCR Campus in association with NITTTR, Chandigarh.
(3rd March 2025 – 7th March 2025)
- Certificate of participation in EICTA Consortium recognized Faculty Development Program (FDP) on “AI for Managers” Organized by EICTA Consortium in association with the Ministry of Electronics and Information Technology.
(16th February 2026 – 28th February 2026)
- Certificate of participation in EICTA Consortium recognized Faculty Development Program (FDP) on “Data Science (ML & AI)” Organized by EICTA Consortium in association with the Ministry of Electronics and Information Technology.
(23rd February 2026 – 8th March 2026)
- Certificate of participation in EICTA Consortium recognized Faculty Development Program (FDP) on “Data Science (ML & AI)” Organized by EICTA Consortium in association with the Ministry of Electronics and Information Technology.
(23rd February 2026 – 8th March 2026)

Work Experience:

- SRM INSTITUTE OF SCIENCE AND TECHNOLOGY-DELHI/NCR CAMPUS
Assistant Professor | August 2023 – present
- SRM INSTITUTE OF SCIENCE AND TECHNOLOGY-DELHI/NCR CAMPUS
Assistant Professor | October 2022 – May 2023 | (on Contract Basis)
- RAM CHAMELI CHADDHA VISHVAS GIRLS COLLEGE (Affiliated to AKTU)
Assistant professor | sept 2021 – sept 2022

Memberships:

- IAENG (International Association of Engineers) Membership
(25th February 2026)