Dayananda Sagar Academy of Technology & Management

(Autonomous Institute under VTU)

Affiliated to VTU
Approved by AICTE
Accredited by NAAC with A+ Grade
4 Programs Accredited by NBA
(CSE, ISE, ECE, ME)

Faculty Name	**Dr. Sahana Sharma M**
Academic Designation	**Assistant Professor, CSE(AI)**
Educational Qualification	**B.E, M. Tech, Ph.D**
Experience in Years (Teaching)	**13 years**
Experience in Years (Industry)	**NIL**
Official Email ID	**sahana-csai@dsatm.edu.in**
Area of Interest	**Computer Networks, Artificial Intelligence, Computer Vision, Internet Of Things.**
Date of Joining	**25-09-2023**
Employee ID	**180735**
Date of Birth	**18-04-1978**



Educational Details

- PhD from VTU in the year 2026
- MTech from T. John Institute of Technology, Bengaluru-76, Karnataka, under VTU in the year 2013.
- B.E from Siddaganga Institute of Technology, Tumkur under Bangalore University, 1999

Personal Details

- Date of Birth: 18/04/1978
- Hobbies: Carnatic Classical Music, Trekking
- Languages Known: Kannada, Malayalam, English, Hindi

Professional Experience

1. Assistant Professor in the department of AIML, K.S. Institute Of Technology Kanakapura Road, Bengaluru between 2022- 2023
2. Faculty of Computer Science for International Baccalaureate Diploma Program between 2019 to 2022
3. Assistant Professor, Archarya Paatashala College of Engineering Kanakapura Road, between 2013- 2019.

Publications

1. Published paper titled “Deep Learning with Hybrid Black Widow-Bird Swarm Algorithm for Link Failure Detection and Prevention in Elastic Optical Networks”, in International Journal on Engineering Applications (IREA), Vol 12, No 4 (2024). Q2 DOI : https://doi.org/10.15866/irea.v12i4.23472

2. Published paper titled “Optical routing: link failure detection-aided optimal routing in elastic optical networks using hybrid deep learning with target-based feature pool formation”, in Australian Journal of Electrical and Electronics Engineering, Taylor & Francis, 28 May 2024. Q3. https://doi.org/10.1080/1448837X.2024.2357462

3. Published paper titled “Hybrid BSO+BMO: An Optimal Routing with Adaptive Deep Learning and Attention Mechanism for Link Failure Detection in Elastic Optical Network”, in ISSN: 2096-3246 Volume 56, Issue 03, March, 2024. Gongcheng Kexue Yu Jishu/Advanced Engineering Science. Q3

4. Published paper titled “LSTM-Based Link Failure Detection and Whale Optimization Algorithm-Based Optimal Routing in Elastic Optical Networks” In: Shetty, N.R., Patnaik, L., Nagaraj, H.C., Venugopal, K.R., Nalini, N. (eds) Advances in Communication and Applications. ERCICAM 2024. Lecture Notes in Electrical Engineering, vol 1300. Springer, Singapore. DOI: https://doi.org/10.1007/978-981-96-0165-3_28

5. Published paper titled "AI-Driven Semantic Question Management System for Interactive Conferences," 2026 IEEE International Conference on AI Engineering and Innovations (AIEI), NIT Jamshedpur, India, 2026, pp. 1-6, DOI: https://doi.org/10.1109/AIEI69164.2026.11496950

6. Published paper titled "Cognitive Radio Networks with Deep Spectrum Sensing using Confidence–Weighted Feature Recalibration Convolutional Neural Network," 2026 3rd International Conference on Integrated Intelligence and Communication Systems (ICIICS), Kalaburagi, India, 2005, pp. 1-6, DOI: https://doi.org/10.1109/ICIICS67880.2026.11483534

7. Published paper titled "Enhancing Network Intrusion Detection Using Dual-Path Dilated Gated Recurrent Units with Contrastive Learning for Detecting Rare and Unknown Attack Patterns," 2026 2nd International Conference on Intelligent Systems and Computational Networks (ICISCN), Bidar, India, 2026, pp. 1-7, DOI: https://doi.org/10.1109/ICISCN67954.2026.11566511

8. Published paper titled "DATES-IDS: A Dynamic Threshold-based Encoded Security Intrusion Detection System in Intelligent Communication Networks," 2026 4th International Conference on Integrated Circuits and Communication Systems (ICICACS), Raichur, India, 2026, pp. 1-6, doi: 10.1109/ICICACS68679.2026.11578712

9. Published paper titled "A Hybrid MobileNetV2 and Similarity-Based AI Framework for Real-Time Snake Identification and Venom Response Assistance," 2026 IEEE Global Symposium on Emerging and Communication Technologies (GSEACT), Hyderabad, India, 2026, pp. 1-6, doi: 10.1109/GSEACT68539.2026.11620244.

10. Published paper titled “RoBERTa-LLaMa Based Multi-factor Stage-Aware Architecture for Therapeutic Dialogue

Systems". In: Saraswat, M., Tiwari, R., Pavone, M.F., Patel, S.J. (eds) Proceedings of International Conference on Computational Intelligence. ICCI 2025. Lecture Notes in Networks and Systems, vol 2062. Springer, Cham. https://doi.org/10.1007/978-3-032-31526-7_23

11. Published paper titled "Embedded AI Systems for Healthcare Wearable Devices using Adaptive Dual-Path Lightweight ECG Intelligence Framework," 2026 5th International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE), Ballari, India, 2026, pp. 1-7, doi: 10.1109/ICDCECE68961.2026.11645640

12. Published paper titled "PerceptoAI: Smart Multimodal AI System for Context-Aware Automation and Dynamic Task Management," 2026 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), Bangalore, India, 2026, pp. 1-6, doi: 10.1109/CONECCT68978.2026.11700610.

13. Published a paper entitled "Recovery schemes for various challenges in Elastic Optical Networks" in International Research Journal of Modernization in Engineering Technology and Science (IRJMETS), Volume 4, Issue 02, February 2022.e-ISSN: 2582-5208, Ref: IRJMETS/Certificate/Volume 4/Issue 02/40200005266.

Patents

1) Published patent tilted "Fpga-Embedded Ai System For Real-Time Eavesdropping Detection And Autonomous Response In Quantum Key Distribution Networks", Patent Application: 202641055662 A , Published Date : 15/05/2026.
2) Published patent tilted "A Conversational Multi-Agent Pipeline System For Intelligent Task Automation", Patent Application: 202641055670 A, Published Date: 15/05/2026.

Awards

Received best paper award for paper titled " LSTM-based Link Failure Detection and Whale Optimization Algorithm-based Optimal Routing in Elastic Optical Networks" in the international conference ERCICAM-24 at NITTE Meenakshi Institute of Technology, Bangalore.

Received best professional performer 2023-24 for contribution in quality publication at Dayanand Sagar Academy of Technology And Management, Kanakapura Road, Bangalore.

Faculty Development Activity/Workshops

1. Participated in FIP on Patent Drafting & Filing conducted at Dayananda Sagar Academy of Technology & Management – 2026
2. Participated in FDP on " AI in Healthcare" Sponsored by Ministry of Electronics and Information Technology (MeitY), Government of India, organized by E & ICT Academy, NIT Warangal, in association with Dept. of Computer Applications, and Dept.of CSE, NIT Raipur(NITR) from 30th July – 08th August, 2026
3. Participated in FIP on " AI for Educators" conducted at Dayananda Sagar Academy of Technology & Management – 2025
4. Participated in AI for Future Workforce Symposium held at Intel Corporate Office, SRR Campus, Bangalore between 29-01-205, 30- 01-2025.

5. Participated in Infosys Springboard Summit 24 conducted on August 23, 2024 at Infosys Campus, Electronic City, Bangalore.
6. Participated in Five day Faculty Immersion Program on “Empowered Teachers as the torch bearers and pedagogical leaders”, organized by Teaching Learning center, DSATM, Bangalore from 26-02-2024 to 01-03-2024.
7. Participated in FDP on “ Real World AI Applications : Bridging Academia And Industry” Sponsored by Ministry of Electronics and Information Technology (MeitY), Government of India, organized by E & ICT Academy, NIT Warangal, in association with Dept. of CSE (Data Science), RNS Institute of Technology from 11th – 20th December, 2024.
8. Five day Faculty Development Program / Training Program On Innovative Teaching and Learning Pedagogy dated 26-30 July 2023, Organized By: Shri Shradha Nath PG College, Jhunjhunun, Gudhagorji, Rajasthan ,Research Foundation of India & RFI-CARE
9. Five -Day FDP on “Artificial Intelligence And Data Science In Image Analysis” organized by the Department of Electronics and Communication Engineering, CMR INSTITUTE OF TECHNOLOGY, Bangalore from 13-02-2023 to 17-02-2023.

Academic Activity

- Placement coordinator
- IA coordinator
- PAC coordinator
- ERP Coordinator
- Time table Coordinator
- College level Spoc for SIH
- IIC Coordinator

Contact Details

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