



Dayananda Sagar Academy of Technology & Management

(Autonomous Institute under VTU)

Affiliated to **VTU**
Approved by **AICTE**
Accredited by **NAAC** with **A+** Grade
6 Programs Accredited by **NBA**
(CSE, ISE, ECE, EEE, MECH, CV)

Faculty Name	Dr.Deepa Mathew K	
Academic Designation	Assistant professor	
Educational Qualification	B.Tech,M.Tech,Ph.D	
Experience in Teaching & Industry	15 Years	
Date of Joining	21-07-2025	
Official Email ID	deepa_aiml@dsatm.edu.in	
Employee ID	180869	

Educational Details

- **Ph.D.**, Karunya University, 2024
- **M.Tech in Communication Systems**, Karunya University, Coimbatore, Tamil Nadu, 2011
- **B.Tech in Electronics and Communication Engineering**, ILAHIA College of Engineering & Technology, Kerala, 2008

Professional Experience

- **Assistant Professor**, Dayananda Sagar Academy of Technology & Management (21-07-2025-Present)
- **Assistant Professor**, A.P.S. College of Engineering (08th January 2024 – 16th July 2025)
- **Assistant Professor**, T.John Institute of Technology (22nd August 2022 – 20th December 2023)
- **Assistant Professor**, Vivekananda Institute of Technology (13th December 2021 – 06th August 2022)
- **Assistant Professor**, City Engineering College (5th August 2011 – 10th December 2021)

Publications

1. S, S. M., Madhavi, K. B., Sundaram, G. M., Britto, A. F., K, D. M., & L, N. (2026). PWM-Based Multi-Mode converter for DC-AC and isolated renewable energy and EV applications. *https://ieeexplore.ieee.org/xpl/conhome/11502015/proceeding*, 472–475.
<https://doi.org/10.1109/iccscs67901.2026.11502946>
2. S, K., Swapna, M., R, S., S, M., K, D. M., & D, A. (2026). A Clinically Oriented Hybrid CNN–Transformer Framework for Robust and Interpretable Lung Cancer Detection from CT Images. *2026 IEEE 18Th International Conference on Computational Intelligence and Communication Networks (CICN)*, 903–908.
<https://doi.org/10.1109/cicn70047.2026.11594343>
3. Mekali, V., Sowbhagya, M. P., Aparna, H. D., Mathew, D. K., Singh, V., Nikam, N. N., Dongre, G. B., & Bhosale, Y. H. (2026). A Cross-Modal retrieval framework for radiology reports and chest X-Ray images. *Engineering Technology & Applied Science Research*, 16(2), 33196–33201. <https://doi.org/10.48084/etasr.17163>
4. Gudimetla, S., Sharma, G., Jahan, A., K, D. M., Malhotra, A., & Adilakshmi, K. (2026). Efficient Fine-Tuning Strategies for LLMs in Low-Resource Environments. *2026 2Nd International Conference on Big Data & Machine Learning (ICBDML)*, 1–6.
<https://doi.org/10.1109/icbdml68582.2026.11544525>
5. Jacob, N., George, S., K, D. M., Laxmi, & M, R. (2025). Content-Based Image Retrieval using Deep Learning for Medical Images. *2025 1st International Conference on Advancement in Futuristic Technologies (ICAFT)*, 1–7. <https://doi.org/10.1109/icaft66710.2025.11453061>
6. Rajeswara Reddy, M., Baghia Laxmi, R., S, N. R., & Deepa Mathew K, Dr. (2025). AIML-Based Adaptive Weight Management to Improve Throughput and Fairness in Indian Networks. *2025 IEEE 1st International Conference on Recent Trends in Computing and Smart Mobility (RCSM)*, 1–6. <https://doi.org/10.1109/rcsm67767.2025.11507422>

7. Mathew, K. D., & Pushpa, T. a. J. M. (2024). Novel radio scheduling Framework for optimal energy efficiency in wireless sensor network. In *Lecture notes in networks and systems* (pp. 160–171). https://doi.org/10.1007/978-3-031-53549-9_17
8. Kavanathottahil, D. M., & Pushpa, T. a. J. M. (2024). A novel and optimized computational framework for energy efficient data dissemination in wireless sensor network. *International Journal of Power Electronics and Drive Systems/International Journal of Electrical and Computer Engineering*, 14(3), 3045. <https://doi.org/10.11591/ijece.v14i3.pp3045-3054>
9. Mathew, K. D., & Jones, A. (2022). CSRS-MAC: Cluster based synchronous radio Scheduling MAC protocol using carrier sense multiple access for wireless sensor network. *Wireless Personal Communications*, 126(1), 209–229. <https://doi.org/10.1007/s11277-022-09741-8>
10. K, D. M., & Jones, A. (2020). Survey: energy efficient protocols using radio scheduling in wireless sensor network. *International Journal of Electrical and Computer Engineering (IJECE)*, 10(2), 1296. <https://doi.org/10.11591/ijece.v10i2.pp1296-1307>
11. Mathew, D. K. (2010). SVD based Image Watermarking Scheme. *International Journal of Computer Applications*, ecot(1), 21–24. <https://doi.org/10.5120/1531-134>
12. Wireless charging vehicles using renewable resources. (n.d.). *International Journal of Scientific Research in Science, Engineering and Technology*.
<https://ijsrset.com/home/issue/view/article.php?id=IJSRSET22954>

International Conferences:

1. “Proactive Hopping Attack Prevention in Virtualized Environments Using SVM and XGBoost “ at Kongunadu College of Engineering and Technology, January 2025.
2. “Integrating Cognitive and Affective Supports in Online STEM Learning” at 4th International Conference on Advances in Data-driven Computing and Intelligent Systems (ADCIS 2025) to be held on September 15-16, 2025 at Christ University.
3. “AIML-Based Adaptive Weight Management to Improve Throughput and Fairness in Indian Networks” Conference held in NIT 5–6 December 2025.

4. “A Systematic Review Of AI-Powered Payment Fraud Detection And Optimization” CIMA 2025 on October 13-14 ,2025.
5. “Content-Based Image Retrieval using Deep Learning for Medical Images” ICAFT-2025 on 19-12-2025.
6. “PWM-based Multi-mode Converter for DC-AC and Isolated Renewable Energy and EV Applications,” presented at the International Conference on Intelligent Computing and Control Systems (ICICCS 2026), held during 16–18 March 2026.
7. 2026 IEEE 2nd International Conference on Big Data and Machine Learning (ICBDML 2026) | 27–28 February 2026 *Efficient Fine-Tuning Strategies for LLMs in Low-Resource Environments*
8. A Clinically Oriented Hybrid CNN–Transformer Framework for Robust and Interpretable Lung Cancer Detection from CT Images – *Presented at the 2026 IEEE 18th International Conference on Computational Intelligence and Communication Networks (CICN 2026), 11–13 June 2026.*
9. A Review for AI Based Underwater Microplastics Detection for Sustainability – *Presented at the First International Conference on Advanced Multidisciplinary Innovations in Science & Engineering for Industry 5.0 (AMISE 5.0), 30 March – 3 April 2026.*

Patents

1. *An Ai – Silent Communicator System*, Indian Patent Journal, Application No. 202541079343, Application Date: 21 Aug 2025, Published: 05 Sep. 2025.
2. *Virtual Reality Headset With Ai-Driven Real-Time Feedback And Assessment*, Application No.: 471801-001, Published: 14 Nov. 2025.
3. *AI Based Underwater Microplastics Detection System for Environmental Sustainability*, Application No. 202641026846, Published on 20 March 2026, Intellectual Property Office, India.

4. *Real-Time Need Prediction in Humanitarian Aid Using Machine Learning – A Practical Review and Adaptation for NGO Donation Platforms*, Application No. 202641049769 A, Patent Office Journal No. 18/2026, Published on 01 May 2026

Academic Activity

- Department NBA coordinator at Dayananda Sagar Academy of Technology and Management.
- Department NAAC coordinator at Dayananda Sagar Academy of Technology and Management.
- Department Internship Coordinator at Dayananda Sagar Academy of Technology and Management.
- SMAP Industry Coordinator at Dayananda Sagar Academy of Technology and Management.
- Department COCT Coordinator at Dayananda Sagar Academy of Technology and Management.
- NAAC Criteria Coordinator at City Engineering College.
- NBA Criteria Coordinator (ECE) and IQAC coordinator at T.John Institute of Technology.
- NBA Criteria Coordinator (CSE) as well as Institutional level Coordinator at A.P.S. College of Engineering

Faculty Development Activity/Workshops

- “Completed Cyber Security Fundamentals Certification from Infosys Springboard on February 6, 2026.
- “Completed Artificial Intelligence Foundation Certification from Infosys Springboard on November 23, 2025.
- “Completed Cyber Security Foundation Certification from Infosys Springboard on February 6, 2026.
- Completed Agile Scrum Certification from Infosys Springboard on July , 2026.

Professional Societies

- Lifetime Member ISTE
- Lifetime Member AMIEE Member

Contact Details

Mobile: +91-9632864033

Email: deepa_aiml@dsatm.edu.in

