

Faculty Profile



Mr. M. PRAVEEN , M.E.
ASSISTANT PROFESSOR-ECE

HIGHLIGHTS:

- Number of Journal Publications:23
- H-Index:5
- Project Funding Received:NIL
- Patents Published:2
- Patents Granted:NIL

PROFESSIONAL LINKS:

- Scopus ID: 57211777065
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57211777065>
- Google Scholar ID:M.Praveen
- Anna University Faculty ID: 2122024
- AICTE Faculty ID: 1-469117604
- Anna University Supervisor ID: NIL
- LinkedIn: NIL

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 16 YEARS
- Industrial Experience: NIL

INTERNATIONAL EXPOSURE:NIL

AREA OF SPECIALIZATION:

- EMBEDDED SYSTEM
- MICROPROCESSOR AND MICROCONTROLLER
- ROBOTICS

Ph.Ds AWARDED WITH DETAILS:

S:No	Name of Scholar	Title of Thesis	Year of Completion	Full Time/Part Time
NIL				

Ph.Ds GUIDING:

- **Full Time Scholars: NIL**
- **Part Time Scholars : NIL**

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY: NIL

PATENTS PUBLISHED/GRANTED:

- IOT BASED AUTOMATION DRONE-GUIDED WATER DISTRIBUTION FOR PRECISION IRRIGATION MANAGEMENT.
- AI BASED FACE MASK DETECTION AND RECOGNITION.

COURSES CERTIFIED: NIL

ACHIEVEMENTS AND AWARDS: NIL

SPECIAL SESSIONS DELIVERED: NIL

PUBLICATIONS DETAILS:

- M. Praveen, V. Harini, and [additional author details to be verified], “NB-IoT Based Smart Car Parking System,” in *Proc. 2019 International Conference on Smart Structures and Systems (ICSSS)*, pp. 1–5, Mar. 2019, doi: 10.1109/ICSSS.2019.8882847.
- M. Praveen, [co-author details to be verified], “TinyML-Based Embedded Analytics Model Compression and Hardware Co-Design,” in *Proc. 6th International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT)*, 2026, doi: 10.1109/ICAECT68478.2026.11426168.
- M. Praveen, S. Harivallabi, and S. Sathyanarayanan, “Cognitive IoT Networks with Bio-Inspired Embedded AI for Predictive Maintenance and Sustainable Energy Optimization,” in *Proc. 7th International Conference on Mobile Computing and Sustainable Informatics (ICMCSI)*, pp. 250–256, 2026.
- M. Praveen, S. Gopika, and D. Haseena, “Real-Time Face Detection Using Embedded DSP,” in *Proc. 5th OPJU International Technology Conference on Smart Computing for Innovation and Advancement in Industry 5.0 (OTCON)*, 2026, doi: 10.1109/OTCON69332.2026.11629770.
- M. Praveen and D. Samiappan, “Adaptive Fuzzy Neural Networks Based Autonomous Robot Navigation Using Environment Partitioning and Controller Design,” *Journal of Electrical Engineering and Technology*, vol. 21, no. 4, 2026, doi: 10.1007/s42835-026-02663-6.
- M. Praveen, S. Pavithra, and S. Narthika, “TinyML-Based Embedded Analytics Model Compression and Hardware Co-Design,” in *Proc. 6th International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT)*, 2026, doi: 10.1109/ICAECT68478.2026.11426168.
- M. Praveen, S. Harivallabi, and S. Sathyanarayanan, “Cognitive IoT Networks with Bio-Inspired Embedded AI for Predictive Maintenance and Sustainable Energy Optimization,” in *Proc. 7th International Conference on Mobile Computing and Sustainable Informatics (ICMCSI)*, pp. 250–256, 2026.
- M. Praveen, S. Gopika, and D. Haseena, “Real-Time Face Detection Using Embedded DSP,” in *Proc. 5th OPJU International Technology Conference on Smart Computing for Innovation and Advancement in Industry 5.0 (OTCON)*, 2026, doi: 10.1109/OTCON69332.2026.11629770.

- M. Praveen, A. P. Dharani, T. Archana, et al., “rGO/Ce-Zn₂SnO₄ Composite: A High-Performance Photoanode for Enhanced Solar Energy Conversion in Dye-Sensitized Solar Cells,” *Journal of Electronic Materials*, vol. 54, no. 4, pp. 2857–2869, 2025, doi: 10.1007/s11664-025-11810-0.
- P. Murugaiah, B. Bhaskar, A. Periyaswamy, et al., “Arduino-Based Traffic Congestion Control with Automatic Signal Clearance for Emergency Vehicles,” *AIP Conference Proceedings*, vol. 3159, no. 1, 2025.
- M. Praveen, M. V. Saradhi, and K. Navyasai, “Improving Routing for Energy Neutral Wireless Sensor Network Based on SWIPT in Wireless Powered Communication Networks With FFO Optimization,” in *Proc. International Conference on Advanced Computing Technologies (ICOACT)*, 2025.
- P. Murugaiah, D. Samiappan, and B. Nagu, “Optimizing Motion in Nanoscale Robotics: A Hybrid WQPSO-Fuzzy Logic Approach for Dynamic Path Planning,” *Studies in Informatics and Control*, vol. 34, no. 2, 2025.
- M. Praveen, M. Abishek, and V. Kowshik, “Understanding CMOS Architecture: A Deep Dive into Comparator Design,” in *Proc. 3rd International Conference on Advancements in Smart, Secure and Intelligent Computing (ASSIC)*, 2025.
- M. Praveen, T. S. Krishnan, P. S. Babu, et al., “Fabrication of Ultrathin rGO Sheet-Wrapped Mixed-Phase MnSe₂/CoSe₂ Nanocomposite for High-Performance Supercapacitor Electrodes with Long-Term Stability,” *Journal of Electronic Materials*, vol. 53, no. 9, pp. 5273–5285, 2024, doi: 10.1007/s11664-024-11257-9.
- M. Praveen and V. Harini, “NB-IoT Based Smart Car Parking System,” in *Proc. 2019 International Conference on Smart Structures and Systems (ICSSS)*, pp. 1–5, Mar. 2019, doi: 10.1109/ICSSS.2019.8882847.
- M. Praveen and co-authors, “A Traffic Road Sign Recognition System Using Raspberry Pi with OpenCV Libraries Based on Embedded Technologies,” in *Proc. IEEE International Conference on Computer Communications and Informatics (ICCCI)*, 2023, pp. 1–5, doi: 10.1109/ICCCI56745.2023.10128214.
- M. Praveen and co-authors, “Brain Tumor Segmentation Using Convolutional Neural Network in MRI Images Based on Deep Learning,” in *Proc. 3rd International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT)*, 2023, pp. 1–7, doi: 10.1109/ICAECT57570.2023.10118196.
- “Recognition of Arbitrary Handwritten Text,” presented at the 9th International Conference on Recent Trends in Power, Energy, Control and Automation, Feb. 17, 2020.
- “Arduino-Based Traffic Congestion Control with Automatic Signal Clearance for Emergency Vehicles,” presented at the Second International Conference on Innovations in ECE

WORKSHOPS ATTENDED:

- Attended Three-day workshop on IUCEE International Engineering Educator conducted by Dr. Rio Dsouza, from 20th November to 22nd November 2019.
- Attended Three-day FDP on Advanced Green Computing Technology In HealthCare conducted by the BME Dept, from 26th November to 30th December 2022.
- Attended Five-day FDP on Contemporary Trends in IOT and Blockchain conducted by the ECE Dept, from 15th March to 19th March 2022.
- Attended Six-day ATAL FDP on Semiconductor device design from RTL to GDS II conducted by the ECE Dept, VEL TECH RANGARAJAN DR. SAGUNTHALA R AND D INSTITUTE OF SCIENCE AND TECHNOLOGY from 18th DEC to 23rd DEC 2023.

PROFESSIONAL MEMBERSHIPS:

- IETE

OTHER DETAILS (If any): NIL