

Faculty Profile



Mrs.DURGA DEVI A , M.E., (Ph.D)
Assistant Professor - ECE

HIGHLIGHTS:

- Number of Journal Publications: 02
- H-Index: 1
- Project Funding Received: Nil
- Patents Published: 08
- Patents Granted: Nil

PROFESSIONAL LINKS:

- Scopus ID: **56801844900**
- Scopus Link: **<https://www.scopus.com/authid/detail.uri?authorId=56801844900>**
- Google Scholar ID:
<https://scholar.google.com/citations?hl=en&user=0NI6Gp0AAAAJ>
- Anna University Faculty ID: 2113153 (Previous College ID)
- AICTE Faculty ID: 1-11273003282
- Anna University Supervisor ID: Nil
- LinkedIn: **<https://www.linkedin.com/in/durga-devi-06b8b9228/>**

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 4 Years & 7 months
- Industrial Experience: NIL

AREA OF SPECIALIZATION:

- VLSI Design
- Digital Principles and Computer Organization
- Machine Learning
- Control systems

- Digital Image Processing
- Embedded Systems and IOT
- Networks and Security
- Electromagnetic Fields

PUBLICATIONS:

INTERNATIONAL JOURNAL:

- **“Secure Routing E- voting Protocol based on Wireless Sensor network Platform with Block chain”**, Int’l J. (IJEER) Volume 12 Issue 4 ISSN: 2347-470X Pages: 1381-1390 November 02 2024.
- **“Securing Beyond-5G Communications in Cloud Assisted IoT Ecosystems via Lightweight Encryption Techniques”** as Published in SSRG International Journal of Electronics and Communication Engineering on March 24,2026 ISSN NO- 2348-8549.

BOOK CHAPTER:

- **“Integrating Machine Learning in Biological Markers for Enhanced Early Detection of Alzheimer’s Disease”**, 2024 by IGI Global Scientific Publications DOI: [10.4018/979-8-3693-6442-0.ch005](https://doi.org/10.4018/979-8-3693-6442-0.ch005)
- **“Investment Project Management in Power Grid Infrastructure using Machine Learning Algorithms-Effective Business Management in Project Portfolio”**, 2025 by IGI Global Scientific Publication DOI: [10.4018/979-8-3373-1942-1.ch007](https://doi.org/10.4018/979-8-3373-1942-1.ch007)
- **“Machine Learning-Driven Classification of Volcanic Seismicity and Tremor Signals for Early Eruption Forecasting”**, 2026 by IGI Global Scientific Publication DOI: [10.4018/979-8-3373-8042-1.ch009](https://doi.org/10.4018/979-8-3373-8042-1.ch009)

PATENT

- **“System And Method For Multimodal Brain Tumor Detection By PCA-GAN Approach And Deep Learning”** as Published in INDIAN PATENT on 22 Aug 2025, Application No.202541074301 A.
- **“System And Method For Automated Brain Stroke Detection Using Ensemble Deep Learning”** as Published in INDIAN PATENT on 19 September 2025, Application No. 202541081443 A.
- **“FPGA-Based Multiphase CT Image Fusion And Hybrid Classification Of Liver Tumors”** as Published in INDIAN PATENT on 19 December 2025, Application No. 202541100545 A.

- “Hybrid Feature Fusion Architecture For Skin Cancer Segmentation And Classification” as Published in INDIAN PATENT on 20 February 2026, Application No. 202541128536 A.
- “AI-Based Error-Predictive Ultra-Low Power SRAM” as Published in INDIAN PATENT on 03 April 2026, Application No. 202641013785 A.
- “Aging-Aware Standard Cell Library With Self Learning And Runtime Performance Adaptation” as Published in INDIAN PATENT on 24 April 2026, Application No. 202641025073 A.
- “AI-Driven Self Evolving Reconfigurable Intelligent Surface(RIS) Architecture For 6G Wireless Communication Networks” as Published in INDIAN PATENT on 12 June 2026, Application No. 202641049979 A.
- “AI- BASED SELF-HEALING FAULT- TOLERANT NOC” as Published in INDIAN PATENT on 12 June 2026, Application No. as Published in INDIAN PATENT on 17 July 2026, Application No. 202641080296 A.

DESIGN PATENT

- BLOCKCHAIN CONTROLLED FARM MONITORING DEVICE as Published in INDIAN PATENT on 06 OCT 2025, Design No. 475973-001.

HONORS AND RECOGNITION

- **Reviewer, *IEEE International Conference on Emerging Technologies in Engineering Applications (ICETEA 2026)***, organized by **Sri Manakula Vinayagar Engineering College (Autonomous), Puducherry, India, 14–15 May 2026.**

NPTEL CERTIFICATIONS

- **NPTEL Certification:** Python for Data Science with 71%, IIT Madras, March 2026
- **NPTEL Certification:** Python for Data Science with 83%, IIT Karagpur, Sept2026

FACULTY DEVELOPMENT PROGRAMS/WORKSHOPS ATTENDED:

- Recent Advancement in Artificial Intelligence(AI) & ML – Organized by Department of Electronics and Communication Engineering, St.Joseph college of Engineering in association with STEP – National Institute of Technology, Surathukal and Pantech – e Learning from 30 Jun to 04 July 2025.
- Harnessing AI for Next Generation Communication and Electrical Technologies – Organized by Department of Electronics and Communication Engineering, DMI college of Engineering from 14 July to 19 July 2025.
- Data Visualization Future Insights and Directions – Organized by Department of Computer Science and Engineering and Institution of Engineers(INDIA) – CSE Student's Chapter, Dr.Sivanthi Aditanar College of Engineering from 21 July to 25 July 2025.
- Quantum Computing – Organized by the Ramrao Institute of Technology, ExcelR Edtech.Pvt.Ltd. from 11Aug to 16 Aug 2025.
- Blockchain and Machine Learning Algorithms in Healthcare – Organized by Department of Electronics and Communication Engineering, (AICTE Training & Learning ATAL Academy), Visvesvaraya College of Engineering & Technology from 18 Aug 2025 to 23 Aug 2025.
- Emerging Trends in VLSI Design for Signal Processing and Communication Systems - Organized by Department of Electronics and Communication Engineering, (AICTE Training & Learning ATAL Academy), Brilliant Institute Of Engineering And Technology from 25 Aug 2025 to 30 Aug 2025.
- Generative AI for Teaching - Organized by Department of Artificial Intelligence & Data Science, J.P.College of Engineering, Tenkasi, in association with Pencilbitz, held on 29 sept 2025.
- Frontiers of Modern Computing: Edge, Cloud, Quantum, and AI Innovations - Organized by Department of Electronics and Communication Engineering, CVR college of Engineering from 06 Oct to 11 Oct 2025.
- Recent Trends and Future Prespective of AI in Image Processing – Tools,Technique and Applications:Research Prespective - Organized by Department of Electronics and Communication Engineering, S.A Engineering College in association with Pantech Solution Pvt Ltd from 13 Oct to 17 Oct 2025.
- Next-Generation Healthcare: Integrating IoT and AI for Predictive Diagnostics and Monitoring - Organized by Department of Electronics and Communication Engineering, (AICTE Training & Learning ATAL Academy), Sri Venkateswara College Of Engineering from 13 Oct to 18 Oct

2025.

- Next-Gen VLSI and Semiconductor Systems: Integrating Machine Learning for Intelligent Design Automation - Organized by Department of Electronics and Communication Engineering, (AICTE Training & Learning ATAL Academy), R.M.D. Engineering College from 03 Oct to 08 Nov 2025.
- Recent Advancements in Machine Learning: Emerging Tools, Technique and Applications - Organized by Department CSE/AIML, Prathyusha Engineering College in association with Pantech Solution Pvt Ltd from 24 Nov to 28 Nov 2025.
- Next-Generation Technologies: An Integrated Approach to EV, AI, Embedded Systems, and Custom IC Design - Department of Electronics and Communication Engineering and Department of Electrical and Electronics Engineering, Kamaraj College of Engineering and Technology (An Autonomous Institution), from 12 Dec to 18 Dec 2025.
- Emerging Technologies for Healthcare Applications - Organized by Netaji Subhas University Of Technology, (AICTE Training & Learning ATAL Academy), from 05 Jan to 10 Jan 2026.
- Agentic & Generative AI for Societal Transformation: Applications in Healthcare, Governance, and Education - Department of Computer Science and Engineering, Ramco Institute of Technology, Rajapalayam, from 27.01.2026 to 02.02.2026.
- Artificial Intelligence and Machine Learning for Next Generation Engineering Applications - Department of ECE, Rathinam Technical Campus, Coimbatore, from 23.02.2026 to 28.02.2026.
- AI-IoT-Edge Transformation: Shaping the Next Generation of Smart Systems - Department of ECE & IEEE Student Branch of R.M.K. College of Engineering and Technology, Gummidipoondi Taluk, Thiruvallur District, from 09.03.2026 to 14.03.2026.
- Recent Trends in Artificial Intelligence and IoT Applications - Department of ECE, Arjun College of Technology, Coimbatore District, from 06.04.2026 to 11.04.2026.
- Recent Industry Trends in VLSI & Embedded Systems (FDP4CET-33) - Department of ECE of Jawaharlal Nehru Technological University Kakinada, Kakinada, Andhra Pradesh,, from 25.04.2026 to 29.04.2026.
- AI TECHNOLOGIES FOR NEXT-GENERATION COMMUNICATION SYSTEMS - Department of ECE, SRM Institute of Science and Technology, Ramapuram, Chennai - 600 089 held between 01.06.2026 to 05.06.2026.

PROFESSIONAL MEMBERSHIPS:

- Life Member for IAENG (International Association of Engineers)
–Membership Number: 570066