Faculty Profile



Mrs. V.SWEDHA M.E., (Ph.D)
Assistant Professor (OG) - IT

HIGHLIGHTS:

- Number of Journal Publications: 1
- H-Index:1
- Patents Published: 6
- Patents Granted: 1

PROFESSIONAL LINKS:

- Scopus ID: 60377055200
- Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=60377055200
- Google Scholar ID: https://scholar.google.com/citations?user=dI7u-1wAAAAJ&hl=en
- Anna University Faculty ID: 275935
- AICTE Faculty ID: 1-7501348781
- Anna University Supervisor ID: NA
- LinkedIn: https://www.linkedin.com/in/swedha-v-6b3447150

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 6 years 10 months
- Industrial Experience: 3 Months

AREA OF SPECIALIZATION:

- Image Processing
- Deep Learning
- Artificial Intelligence
- Machine Learning

PATENTS PUBLISHED/GRANTED:

- BIO-INSPIRED NEURAL NETWORK ARCHITECTURE FOR REAL-TIME POWER GRID OPTIMIZATION AND FAULT DETECTION

- EDGE-CLOUD COLLABORATIVE MACHINE LEARNING ARCHITECTURE FOR REAL-TIME IOT DATA PROCESSING
- INTELLIGENT IOT DEVICE DISCOVERY AND LIFECYCLE MANAGEMENT LEVERAGING MACHINE LEARNING AND CLOUD APIS
- EXTENSIVE DEVICE TO ANALYZE AND DESIGN TOFORMULATE HERBAL DRUGS
- INFRARED PROJECTOR FOR VEIN DETECTION
- A HYBRID REASONING FRAMEWORK FOR EXPLAINABLE AI WITH COMMON SENSE KNOWLEDGE
- AN AI DRIVEN SMART AGRICULTURE MANAGEMENT AND TRADE SYSTEM USING MACHINE LEARNING

COURSES CERTIFIED:

- Artificial Intelligence Nanodegree-UDACITY
- Java Programming for Beginners-SIMPLY LEARN
- OOPS in Java-GREAT LEARNING
- Introduction to Deep Learning-GREAT LEARNING
- Java Programming for Beginners-SIMPLY LEARN
- Foundations of Deep Learning: Concepts and Applications-NPTEL

Faculty Enrichment Programs / Workshops / FDPs Attended or Nominated:

- Attended AICTE ATAL FDP on AI in Healthcare & Intelligent Systems | SNIST (Jan 2026)
- Attended IEEE Faculty Development Program on AI & Cybersecurity (LLMs, Generative AI, Federated Systems) | MITS (Mar 2026)
- Attended FDP on Advanced Deep Learning Techniques for Healthcare AI | CVR College (Mar 2026)
- Attended FDP on Systematic Research Paper Writing | Research Foundation of India (Apr 2026)
- Attended FDP on Foundations of Data Science & Applications | GNIT (Nov 2025)
- Attended Workshop on Simplifying Complex Data with Pivot Analysis | CEDAAR (Nov 2024)
- Attended National Workshop on Designing Effective Surveys | CEDAAR (Nov 2024)
- Attended R&D Webinar on Mastering Journal Publication | AMET University (Sept 2024)
- Attended Workshop on Hands-on Model Building using Keras & TensorFlow | SVCE (Oct 2024)
- Nominated for the Cognizant Digital Nurture Reverence Faculty Enrichment Program (FEP) – Industry In-depth, scheduled on 16th March,2023.
- Attended IEEE Madras Section FDP on Emerging Trends in AI & Deep Learning | Sri Sai Ram Institute of Technology (Dec 2023)
- Attended Workshop on Hands-on Training on Development of E-content (MOODLE) & Educational Video Creation | CIT–TLC (Jan 2021)

- Attended FDP on Artificial Intelligence Tools for innovative Teaching Pedagogy | St.Thomas college of Engineering and Technology,Alappuzha.(June 26,2026)

SPECIAL SESSIONS DELIVERED:

- Delivered FDP session for School Faculty on the Topic "Artificial Intelligence" at PM Shri Kendriya Vidhyalaya Air Station,Avadi on November 1,2025.

CONFERENCES/SEMINARS PRESENTED OR ATTENDED:

Book Chapters

- Swedha V., Shanthini S., Karthika R. N., "Exploring VGG16 and VGG19 for Autism Detection in Pediatric Images," Springer, 2026. DOI: 10.1007/978-3-032-08504-7_24

Journal / Conference Papers

- Angelin Gladston, Swedha Velraj*, Harini Nadarajan, "Hybrid Multi-Scale 3D Segmentation Framework for Automated Stenosis Detection," Congenital Heart Disease, vol. 20, no. 6, pp. 769-792, 2025. DOI: 10.32604/chd.2025.068879
- "Modern Powered Agricultural Management and Trade System Using AI and IoT," IEEE Conference, 2026. DOI: 10.1109/ICSSEECC69062.2026.11722311
- "Transformer-Based Spatiotemporal Modelling of EEG Signals for Early Alzheimer's Diagnosis," 1st International Conference on Computer, Mechatronics, Robotics & Artificial Intelligence (ICCMRAI 2026), organised by IEEE, Pune, India, 2026. DOI: 10.1109/67732.2026.11723554
- "Explainable Deep Learning for Identifying Neuropsychiatric Disorders from fMRI Data," IEEE Conference, 2026. DOI: 10.1109/ICCIKE67021.2025.11318256
- "Heart Attack Prediction Using Big Data Analytics," 7th International Conference on Computational Intelligence in Data Science (ICCIDS-2024), Department of CSE, SSN College of Engineering, Chennai, India. DOI: 10.1007/978-3-031-69986-3_22
- "Temporal Attention Graph Neural Network to Forecast Cognitive Decline through Functional Brain Connectivity," IEEE International Conference on Intelligent Electronics and Computational Systems (IECS 2026), VIT Bhopal University, 2026. (DOI to be added upon publication in IEEE Xplore.)
- Paper presented at Intelligent Computing, Advanced Communication and Materials (IC2ACM-23), RMK Engineering College, Chennai, 2023.