DEPARTMENT OF COMPUTER AND COMMUNICATION ENGINEERING

Teaching Faculty details for the academic year 2025-26

Name of the Faculty	Pavendan.K.	
Gender	Male	
DOB	21.06.1988	
Qualification	B.E, M.E, Ph.D	
Designation	Associate Professor Silver	
Date of Joining	25-05-2023	
UG Degree Completion	April-2009	
UG- Name of the University	Anna University	
PG Degree Completion	July-2012	
PG-Name of the University	Anna University	
Area of Specialization	UG: B. E. ECE	PG: M.E-Applied Electronics
PhD - Yet to be Registered	-	
PhD Pursuing	-	
PhD Completion	Yes	

Phd– Name of the University	Anna University
PhD Specialization	Machine Learning
Research Interested area	Digital Image Processing , Machine Learning, Deep Learning,
Courses Taught in UG / PG Level	❖ Digital Electronics ❖ Digital Principles and System Design ❖ Basics of Electrical and Electronics Engineering ❖ Electron Devices ❖ Circuit Theory ❖ Signals and Systems ❖ Digital Signal Processing ❖ Wireless Sensor Networks ❖ Wireless Communication ❖ Mobile Communication ❖ System On Chip Design ❖ ASIC and FPGA Design ❖ VLSI Design ❖ Digital Image Processing ❖ Advanced Digital Image Processing ❖ Low Power VLSI Design

Experience	**Teaching**	**6 Years** 1. Sri Sairam Institute of Technology, Dept of CCE [25.05.2023-Till Date] 2. Adhiparasakthi Engineering College, Dept of ECE [01.06.2013 – 16.08.2016] 3. Balamani Arunachalam Engineering College, Dept of ECE [3.02.2013 – 24.04.2013]
	Research	6 Years

	Industry	NA
	Others	-
Attended	**Workshop**	- Attended *Two Days Workshop* on "**Robotics**" on **Sep 2021** Organized by **APEC, Melmaruvathur.** - Attended *Two Days Online Workshop* on "**Real Time Data Analytics using Machine Learning**" Organized by **Mepco Schlenk Engineering College, Sivakasi** on **25.11.2021 - 26.11.2021** *Attended Three Days Online Workshop on* "**Machine Learning Solutions for Image Processing Applications using Python**" Organized by **Mepco Schlenk Engineering College, Sivakasi** on **2.12.2021 to 4.12.2021** *Attended One Day Workshop on* "**Design Thinking**" organized by **Sri Sairam Institutions, Chennai** on **28.07.2023** *Attended One Day Webinar on* "**URL Phishing Attack Detection**" organized by **SRM Institute of Science and Technology, Chennai** on **25.08.2023**
	Conferences	- Presented a Paper "**Analysis of Carrier Frequency Selective Offset Estimation using Zero IF and ZCZ in MC-DS-CDMA**" in **March 2012 International Conference on Computing Techniques Embedded Systems and Drives** at PPG Institute of Technology, Coimbatore. - Presented a Paper "**FPGA Implementation of Reduced Bit Error Performance in MC-DS-CDMA**" in **March 2012 National Conference on Communication and Signal Processing** at GKM College of Engg. & Tech,

Chennai.

- Presented a Paper "**A Comparative Study on Noise Models and Filtering Techniques using HMIS based Microalgae Images**" in **December 2017 International Conference on Technological Advancements in Power and Energy** at Amrita School of Engineering, Kerala.

- Presented a Paper "**A Study of Hyper-Spectral Microscopic Imaging System (HMIS) based Microalgae Image Processing for Species Identification**" in **February 2018 International Conference on Recent Advancements in Chemical, Environmental and Energy Engineering** at SSN College of Engineering, Chennai.

- Presented a Paper "**Rapid Determination of Biomass Concentration Quantification in Microalgae using Digital Image Based MicroPlate Assay**" in **March 2018 International Conference on Recent Trends in Analytical Chemistry ICORTAC 2018** at University of Madras Guindy Campus Chennai.

- Presented a Paper "**Water Monitoring Based on Harmful Algal Blooms: A Study on Hyperspectral Microscopic Imaging System (HMIS) using Image Processing**" in **Nov 2018 International Conference on Biotechnological Research and Innovation for Sustainable Development (BioSD)** at CSIR-IICT, Hyderabad.

- Participated as Reviewer in 10th International Conference ICCSP 24, held on Adhiparasakthi

	Engineering College during 12 and 13th April 2024
FDP	1. Attended *2 Weeks AICTE sponsored FDP* entitled "**Emerging Issues and Challenges in Wireless Networks**" from **10.06.2013 to 19.06.2013** organized by **Department of ECE, Adhiparasakthi Engineering College, Melmaruvathur.** 2. Attended *5 Days FDP* entitled "**Instructional Design and Delivery Systems**" from **09.12.2013 to 13.12.2013** organized by **Department of ECE, Adhiparasakthi Engineering College, Melmaruvathur** in association with **NITTTR, Chennai.** 3. Attended 5 Days short term training programme on "**Data Acquisition & Measurement Techniques using NI LabVIEW**" from **05.05.2014 – 09.05.2014** organized by **Department of Mechanical Engineering, Adhiparasakthi Engineering College, Melmaruvathur** in association with **National Instruments Systems, Bangalore, India**. 4. Attended *1 Week FDP* entitled "**Signals and Systems**" from **23.06.2014 to 30.06.2014** organized by **ASAN Memorial College of Engineering and Technology** in association with **Anna University, Chennai.** 5. *Attended 5 Days* **ISTE Approved Short Term Training Programme** on "**Emerging Trends in Image Processing and its Applications**" from **08.12.2014 to 12.12.2014** organized by **Annamalai University, India.** 6. *Attended 8 Weeks* **NPTEL FDP** on "**Introduction to machine learning IITKGP**" from **July 2023 to Sep 2023** organized by **NPTEL-AICTE IITKGP, New Delhi.**

Organized		7. *Attended 4 Weeks* **NPTEL FDP** on "**Python for Data Science IITM**" from **Jan 2024 to Feb 2024** organized by **NPTEL-AICTE IITM, Madras.** 8. *Attended 1 Week* **SHORT TERM COURSE** on "**RECENT INDUSTRIAL TRENDS IN CONTROL AND OPTIMIZATION**" from **5th to 9th June 2024** organized by **Dr.AmbedkarNationalInstituteofTechnology, Punjab .**
	Workshop	1. Organized One Day Online Guest Lecture on "**Emerging Trends in the Field of Computer Networks**" on 7th September 2023 at Sri Sairam Institute of Technology, Chennai. 2. Organized One Day Seminar on "**Progres Infini**" on 26th September 2023 at Sri Sairam Institute of Technology, Chennai. 3. Organized One Day Workshop on "**Pitching Ideas Evaluation - LIVE IN LAB**" on 10th October 2023 at Sri Sairam Institute of Technology, Chennai. 4. Organized Two Days IEEE Boot Camp on "Cloud Platform for IoT" on 4th and 5th March 2024 at Sri Sairam Institute of Technology, Chennai. 5. Organized One Day Hands-On Training on "**WIRESHARK Packet Analysis**" on 6th March 2024 at Sri Sairam Institute of Technology, Chennai.
	Conferences	1. Organized Two Days International Conference on "**Recent Trends in Clean Technologies for Sustainable Environment (CTSE-2019)**" on 26-27 September 2019 at SSN College of Engineering, Chennai.
	FDP	**0**

Professional Membership	IEEE Member (Madras Section): #99401572
No. of papers published in National Journals / Conferences	- Published a Paper entitled "**FPGA Implementation of Reduced Bit Error Performance in MC-DS-CDMA**" in **March 2012 National Conference on Communication and Signal Processing** at GKM College of Engg. & Tech, Chennai. - Published a Paper entitled "**Design of Shift Register using Pass Transistor Logic Flip Flop**" in **March 2015 National Conference on Innovations in Information, Communication & Electrical Technologies** at Muthayammal College of Engineering, Rasipuram.
No. of papers published in International Journals / Conferences	- Published a Paper entitled "**Analysis of Carrier Frequency Selective Offset Estimation using Zero IF and ZCZ in MC-DS-CDMA**" in **March 2012 International Conference on Computing Techniques Embedded Systems and Drives** at PPG Institute of Technology, Coimbatore. - Published a Paper entitled "**Design of Pulse-Triggered Flip-Flop using Pass Transistor Logic for Low Power Consumption**" in **August 2014 International Journal of Electrical, Electronics and Computer Systems** at IRDINDIA, Bhuvaneshwar. - Published a Paper entitled "**Improving the Power System in CMOS Start-Up Circuit in Radio Frequency Identification Application**" in **International Journal of Advanced and Innovative Research,** ISSN: 2278-7844,

	ijair.jctjournals.com **November 2015**.
	● Published a Paper entitled "**A Design of PLL with a Process-Immune Locking-in Monitor and Reduce Jitter**" in **International Journal of Innovative Research in Science, Engineering and Technology** ISSN: 2319-8753, www.ijirset.com **May 2016**.
	● Published a Paper entitled "**A Comparative Study on Noise Models and Filtering Techniques using HMIS based Microalgae Images**" in **December 2017 International Conference on Technological Advancements in Power and Energy** at Amrita School of Engineering, Kerala.
	● Published a Paper entitled "**A Study of Hyper-Spectral Microscopic Imaging System (HMIS) based Microalgae Image Processing for Species Identification**" in **February 2018 International Conference on Recent Advancements in Chemical, Environmental and Energy Engineering** at SSN College of Engineering, Chennai.
	● Published a Paper entitled "**Rapid Determination of Biomass Concentration Quantification in Microalgae using Digital Image Based MicroPlate Assay**" in **March 2018 International Conference on Recent Trends in Analytical Chemistry ICORTAC 2018** at University of Madras Guindy Campus Chennai.
	● Published a Paper entitled "**A Comparative Analysis of Dye Concentration using Image Based Regression Models**" in **March 2018**

	International Conference on Recent Trends in Analytical Chemistry ICORTAC 2018 at University of Madras Guindy Campus Chennai.
	● Published a Paper entitled "**Determination of Concentration for Congo Red Dye using Colour Image Analysis**" in **March 2018 International Conference on Bio signals, Images and Instrumentation ICBSII 2018** at SSN College of Engineering, Chennai.
	● Published a Paper entitled "**Water Monitoring Based on Harmful Algal Blooms: A Study on Hyperspectral Microscopic Imaging System (HMIS) using Image Processing**" in **Nov 2018 International Conference on Biotechnological Research and Innovation for Sustainable Development (BioSD)** at CSIR-IICT, Hyderabad.
	● Published a Paper entitled "**An insight into carbon balance of product streams from hydrothermal liquefaction of Scenedesmus abundans biomass**" in **Renewable Energy (ELSEVIER)** Vol. 151, pp. 79-87, I.F:8.634, **May 2020.**
	● Published a Paper entitled "**Modeling of wastewater treatment, microalgae growth and harvesting by flocculation inside photo bioreactor using machine learning technique**" in **Journal of Intelligent and Fuzzy Systems** ISSN: 1064-1246, Vol. 43, No. 5, pp. 5607-5620, IF: 1.737, **July 2022.**
	● Published a Paper entitled "**Smart Diagnosis: Early Detection and Management of Plant**

	Diseases" in **International Journal for Research in Applied Science & Engineering Technology (IJRASET)** ISSN: 2321-9653; Volume 13 Issue V **May 2025**. ● Published a Paper entitled "**Integrated Biogas Leakage Prevention and Electricity Conversion System for Safe and Sustainable Energy Generation**" in **International Scientific Journal of Engineering and Management (ISJEM)** ISSN: 2583-6129; Volume 04 Issue 07; Impact Factor: 7.839 July 2025. ● Published a Paper entitled "**Non-Invasive Gender Classification of Chicken Eggs Based on Image Analysis**" in **International Journal on Science and Technology (IJSAT)** E-ISSN: 2229-7677 Volume 16, Issue 3 Jul-Sep 2025. ● Published a Paper entitled "**A Digital Farmer Marketplace Connecting Rural Farmer and Consumer without Middle Person**" in **International Journal for Research in Applied Science & Engineering Technology (IJRASET)** ISSN: 2321-9653; Volume 13 Issue VII; SJ Impact Factor: 7.538 July 2025. ● Published a Paper entitled "**Zirconium Nanomaterials for Treatment of Wastewater: Augmenting Antimicrobial Effectiveness and Optimization Through Artificial Intelligence Integration**" in **International Journal of Environmental Research** Volume 20, Issue 25; https://doi.org/10.1007/s41742-025-00988-0 Nov 2025.

	● Published a Paper entitled "**Chicken Egg Gender is Identified using Image Analysis Techniques in Non-Invasive Manner**" in **IJIRAE:: International Journal of Innovative Research in Advanced Engineering** Volume 12, Issue 11; https://doi.org/10.26562/ijirae.2025.v1211.09 Nov 2025.
No. of Books published	0
No.of UG Students Guided	20
No.of PG Students Guided	2
No.of PhD's Guided	0
Research Funded Projects	NIL
Patents	01 - AI Based Robot for Object Identification (Granted) 02-Secure Authorization and Deduplication of Medical Record with Strong CYBER SECURITY ENC/DEC Algorithms in Hybrid Cloud (Published) 03-IoT Based Robot for Medical Supply (Filed)
Technology Transfer	Attending FDP and Certification courses (NPTEL) related to the handling Subject for better and confident delivery of lectures.
Achievements	. ● Active Member of IEEE Association (# 99401572 - Madras Section). ● Contributed to World Scouting and Completed the course SfH 1: Safe from Harm Essential Learnings on 11-Jan 2025. ● Certified as active cultural coordinator in Sparkle 2025 conducted by Sri Sairam Institute of Technology on 26-4-25. ● Successfully completed Panchayat Administration and Rural Development Schemes Training Course Program (B-IV:CC2025/B4/46-Grade-A) during Sep 2025.

	- Certified as recognised APPLE TEACHER in Sri Sairam Institute of Technology on 18-11-25. - Successfully completed online certification course on UNESCO MGIEP SEEK Programme dated on 3-12-25. - Awarded as NPTEL MENTOR in the field of Cloud Computing during Jul-Dec 2025. - Awarded as NPTEL MENTOR in the field of Programming in Software Conceptual Design during Jul-Dec 2025.
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Mother Name	M.Panmozhi
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Permanent Address	No.3, Second Street, Varadhar Reddyar Nagar, Acharapakkam 603301