



# PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE

[An Autonomous Institution]



Approved by AICTE, New Delhi / Affiliated to Anna university, Chennai / NAAC Accredited with A++ Grade  
ISO 9001:2015 Certified Institution / Recognized by UGC under section 2(f)&12(B) of UGC Act 1956  
Medavakkam - Mambakam Road, Ponmar, Chennai - 600127

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

**Name** : D.Nirmala  
**Designation** : Assistant Professor  
**Photo** :



**Areas of Interest** : Image Processing, Networking, wireless communications  
**About Myself** : I will do my absolute best in all things.  
I am confident in my abilities.  
My positive strengths are being confident, hard working, sincerity and having passion for all situations.  
**Gmail** : [nirmala.d.ece@psvpec.in](mailto:nirmala.d.ece@psvpec.in)  
**Linked in (link)** : [www.linkedin.com/in/nirmala-d-3771251b4](http://www.linkedin.com/in/nirmala-d-3771251b4)  
**facebook link** : NIL  
**Research scholar link** : NIL  
**Current Profession** : Working as a Assistant professor from 18-6-2012 to till date

### PROFESSIONAL EXPERIENCE

#### Fdp & Conference & Workshops Attended:

- AICTE sponsored FDP on “ Recent trends in Artificial Intelligence and Quantum computing” at St Joseph College of Engineering & Technology (3-02-2025 to 8-2-2025).
- AICTE sponsored FDP on “Emerging Trends and Technologies in Renewable Energy for Sustainable Development (10-02-2025 to 15-2-2025).

- AICTE sponsored FDP on Optical Communication beyond 5G Networks (12 weeks course Jan-Apr 2025)
- AICTE sponsored FDP on Simulation of Communication Systems using MATLAB (12 weeks course July-Oct 2025)
- AICTE sponsored FDP on Introduction to Adaptive Signal Processing (8 weeks course Aug-Oct 2025)
- AICTE sponsored FDP on Communication Networks (8 weeks course Jan-Apr 2023)
- FDP on “Block chain and cryptocurrency” at sairam engineering college (9-8-2022-13-8-21).
- FDP on “Emerging Applications in image processing” at Rajalakshmi Institute of Technology (1-3-22 to 5-3-22)(online mode).
- FDP on “Machine Learning Techniques” at Sairam engineering college (7-6-2021 to 12-6-2021).
- FDP on “Applications of image processing” at St. Joseph’s college of engineering(14-7-2020 to 18-7-2020)(onliemode).
- FDP on “Facilitating 21<sup>st</sup> Century Learners” at Idhaya engineering college (6 &7 th july 2020)(onlinemode).
- Workshop on “Aspects of outcome based education and use of software” at sri venkateswara college of engineering (6-8-2020 to 8-8-2020).
- FDP on “Advancements in nano technology” at saveetha engineering college (14-8-2020) (webinar).
- FDP on “Conceptualization of Artificial Intelligence and Machine Learning” at Raghu Institute of technology.(6-9-2020)(webinar).
- AICTE sponsored national conference on “Next generation Computing Technologies and their role in national technologies” organized by Institute of technology. (21 & 22th August 2020)
- AICTE sponsored FDP on “ Emerging technology in wireless communication networks with hands on training in advanced simulators”at Dhanalakshmi Engineering college (19-11-2019 to 2-12-2019).
- National level seminar on “VLSI Architecture for Image Processing” at Prince Dr K Vasudevan college of engg and tech (14 &15 june 2019)
- Two weeks FDP on “Linear Integrated Circuits” at prince shri venkateshwara padmavathy engineering college. (26-11-2018 to 8-12-2018)

## **Publications :**

- D.Nirmala, “Feature Extraction Techniques in Document Image Analysis An Analysis” 2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT 2024)
- D.Nirmala, “Exploring the Use of Machine Learning Algorithms in Text Classification” 2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT 2024)
- D.Nirmala, “Partitioning-Based Filtering Technique for Accelerated Speckle Reduction in SAR Images” 2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT 2024)
- D.Nirmala, “Advanced Control Techniques for High-Power Power Converters” 2024 1st International Conference on Power and Energy Systems (ICPES 2023)
- D.Nirmala ,”An Internet of Things (IoT) Consumer Data Network Security Assessment that Uses Variant Mode Decomposition (VMD) and Fused CNN-Attention Bi- LSTM” , 2024 Global Conference on Communications and Information Technologies, GCCIT 2024
- D.Nirmala ,”A Mixed-Methods of ML Strategy for Cardiovascular Disease Prediction Using Classification Data” , 2024 International Conference on Recent Advances in Science and Engineering Technology (ICRASET)
- D.Nirmala, “The Implementation of Blockchain Technology to Manage Data in a Secure and Transparent Manner for Biomedical Applications”, 2024 9th International Conference on Communication and Electronics Systems (ICCES)
- D.Nirmala, “Optimizing wireless performance in wearable flexible electronics: antenna strategies” 2023 Global Conference on information Technologies and communication (GCITC)
- D.Nirmala, “Optimizing wireless performance in wearable flexible electronics: antenna strategies” 2023 Global Conference on information Technologies and communication (GCITC)
- Gowri Vidhya D. Nirmala ‘QUALITY CHALLENGES IN DEEP LEARNING DATA COLLECTION IN PERSPECTIVE OF ARTIFICIAL INTELLIGENCE’, published in The Review of Contemporary Scientific and Academic Studies (The RCSAS- ISSN: 2583-1380), in Volume-3, Issue No.3, March 2023.
- Mrs.P.Geethabala, Mrs.D.Nirmala, R.Kalpana, M.Vanmathy –“ GLUCOSE MONITORING USING SWEAT” International Journal of Pure and Applied Mathematics Volume 119 No.16 2018, 1187-1190 ISSN: 1314-3395

- Mrs. D. Nirmala Mrs. Geetha Bala, , Aswin Karthik-“ SMART TOLL BOOTH USING ZIGBEE AND PIC MICROCONTROLLER” International Journal of Pure and Applied Mathematics Volume 119 No.16 2018, 1275-1278 ISSN: 1314-3395
- Nirmala, D. & Geetha Bala, P. & Kaviya, S. & Pavithra Mary, S.. (2018). SMART WASTE MANAGEMENT USING INTERNET-OF-THINGS (IOT). International Journal of Pure and Applied Mathematics. Volume 119 No. 12 2018, 203-206.
- D.Nirmala, P.Geetha bala “Measuring and Implementing Lower Limb Motion Using Inertial Measurement Unit” International Journal of Engineering Development and Research (www.ijedr.org) 440 IJEDR | Volume 5, Issue 4 | ISSN: 2321-9939 IJEDR1704069 © 2017

**Patents :**

- ❖ Smart Locking System, Dr.K.K.Senthil Kumar, Dr.T.Sripriya, D.Nirmala, Rithu Bharathan.S, Suriya Rajan.S.J, Application No.202241042950 A , Patent published on 5.8.2022
- ❖ Rfid based covid prevention system , Ms D.Nirmala, Dr.Joyce Jacob, Ms G. Kalanandhini, , Rithu Bharathan.S, Suriya Rajan.S.J, Application No.202241046424 A , Patent published on 2022-23

**Projects Guided :**

- System For Distributing And Tracking Water Quality- Pooja.G, Sowmiya .U Department of ECE
- Smart Toll Booth Using Zigbee and Pic Microcontroller- Aswin K , Karhtik.A Department of ECE
- Smart Waste Management Using Internet-Of-Things (IOT)- Pavithra marry.V, Kaviya. P Department of ECE
- Implementation of Automatic Health Monitoring Systems- Karthik E, A.Jeeva Department of ECE
- Hookworm Detection in Wireless Capsule Endoscopy Images using Edge Morphological Operator -A.Jayavathani A.Mounika Department of ECE

## **Certifications :**

### **NPTEL CERTIFICATIONS**

- Elite NPTEL certification on Optical Communication beyond 5G Networks (12 weeks course Jan-Apr 2025)
- Elite NPTEL certification on Simulation of Communication Systems using MATLAB (12 weeks course July-Oct 2025)
- Elite NPTEL certification on Introduction to Adaptive Signal Processing (8 weeks course Aug-Oct 2025)
- Elite NPTEL certification on Communication Networks (8 weeks course Jan-Apr 2023)
- Elite NPTEL certification on Signals & Systems (12 week course Jan-Apr 2020)
- FDP Elite NPTEL certification on Antennas (12 week course Jan-Apr 2019)
- FDP Course on Antennas (12 week course Jan-Apr 2019)
- Elite NPTEL certification on Digital Image Processing (12 week course Jul-Oct 2019)
- FDP Course on Digital Image Processing (Jul-Oct 2019)
- Elite NPTEL certification on principles of communication systems-1 (12 weeks course Jan-Apr 2018)
- NPTEL certification on An introduction to coding systems (8 weeks course Jan-Apr 2018)

## **Education Details :**

M E Applied Electronics at Velammal Engineering college, Anna university  
B E Electronics and Communication Engineering at Prathyusha Engineering College,  
Anna University

## **Memberships :**

- ❖ Life Member in IAENG (Member No: 187326)
- ❖ Life Member in ISTE

## **Awards & Achievements:**

- Received the certificate of merit for 100% score obtained in mathematics at school level.
- Received NPTEL Star Award.