Department of Electronics and Communication Engineering

Personal Details	
Name:	Dr.R.Padmavathy
Designation:	Professor
Educational Qualification:	M.E.,Ph.D.
Experience:	16 years
Area of Specialization:	Analog Electronics, Signal Processing, Machine Learning Algorithms

Educational Details

S.No.	Degree	Branch/Specialization	Institute/University	Year
1	BE	Electronics and Instrumentation Engineering	National Engineering College, Manonmaniam University	2000
2	ME	Applied Electronics	Sathyabama University	2009
3	Ph.D.	Signal Processing, Machine Learning Algorithms	Anna University, Chennai	2018

Publication Details

International Journal

1. **R.Padmavathy**, V.Ranganathan,"Optimizing feature selection and Support Vector Machine using Clonal Selection for Brain Computer Interface",Middle-East Journal of Scientific Research 24 (Techniques and Algorithms in Emerging Technologies),ISSN 1990-9233;267-274, 2016.

2..**R.Padmavathy**, R.Anandan,"Recognition of Phiz using Image Processing Techniques",International Journal of Advanced Research Trends in Engineering and Technology(IJARTET),ISSN 2394-3777,Vol.3,Issue 3, pp 118-123,March 2016.

3.**R.Padmavathy**, V.Ranganathan,"Recognition of Phiz using image processing techniques",International Journal of Advanced Research Trends in Engineering and Technology,Vol. 3,Issue 3,ISSN 2394-3777,March-2016.

4.Srinivasan R., **Padmavathy R.**,"A Case Study of Green Energy Conservation for Electric Vehicle and Centralized Public Transport using Smart E-Wallet Card",International Journal of Advanced Research Trends in Engineering and Technology(IJARTET),ISSN 2394-3777,Vol.3,Issue 3, pp 111-117,March 2016.

5.B.Shanmugam, **R.Padmavathy**, R.Srinivasan,"Study of Advanced On Real Time Analysis of Muscle Activities", IOSR Journal of Engineering(IOSRJEN),ISSN 2278-8719,Vol. 06, Issue 1,pp 68-74,January 2016.

6.**R.Padmavathy**, V.Ranganathan,"Optimizing Support Vector Machine for Electrocorticography based Brain Computer Interface Using Clonal Selection",Journal of Pure and Applied Microbiology,ISSN 0973-7510,Vol. 9, Special edition, pp. 47-56, Aug-2015.

7.M.Vidhya**, R.Padmavathy,**"Automatic extraction of Car License Plate Number based on Support Vector Machine and Artificial Neural Networks",Asian Journal of Information Science and Technology,Vol.2.No.2 2014 pp 50-54 , May-2014.

8.**R.Padmavathy**, V.Ranganathan,"A Review on EEG Based Brain Computer Interface Systems",International Journal of Emerging Technology and Advanced Engineering,ISSN 2250-2459, ISO 9001:2008,Certified Journal, Volume 4, Issue 4,April 2014.

9. Sridevi, J., Padmavathy, R., Ayswarya, R., ... Abed, Z., Vivek, V. Battery management system life cycle estimation and degradation,E3S Web of Conferences, 2024, 564, 08003

10.Padmavathy, R., Kalaiarasi, G., Venkatasubramanian, R., Devi, M., Joshila Grace, L.K. Comparative Analysis of Deep Learning and Machine Learning Algorithm for Concrete Crack Detection

11.Padmavathy, R., Kalaiarasi, G., Durgadevi, G., Yogitha, R., Karpura Dheepan, G.M. Study of Support Vector Machine for Classification of Brain Tumours,AIP Conference Proceedings, 2024, 3022(1), 020008

12.Selvi, M., Kalaiarasi, G., Mana, S.C., Yogitha, R., Padmavathy, R. Energy and Security Aware Hybrid Optimal Cluster-based Routing in Wireless Sensor Network,Wireless Personal Communications, 2024, 137(3), pp. 1395–1422

13.Padmavathy, R., Singh, S.K., Sindhu, M., ... Saxena, A., Singh Dari, S. Enhancing Power Grid Resilience against Cyber Threats in the Smart Grid EraE3S Web of Conferences, 2024, 540, 10021

14.Padmavathy, R., Jeya Prakash, K., Greeta, T., Divya, K. A Machine Learning-Based Energy Optimization System for Electric Vehicles,E3S Web of Conferences, 2023, 387, 04008

15.Thaiyalnayaki, S., Kalaiarasi, G., Nithya, M., Padmavathy, R. Classification System on Diabetes Prediction using Deep Learning Approach,AIP Conference Proceedings, 2023, 2523, 020017 Governor,

16.K., Ramanujam, P., Mana, S.C., Perumal, G. Near duplicate detection of images with area and proposed pixel-based feature extraction,Concurrency and Computation: Practice and Experience, 2023, 35(2), e7477

17.Kuppusamy, M., Gowindasamy, M., Loganathan, K., ... Padmavathy, Saravanan, Design and Implementation of Automated Inspection System for Manufacturing Machinery Based on Internet of Things, 2023 2nd International Conference on Smart Technologies for Smart Nation, SmartTech Con 2023, 2023, pp. 1323–1328

18.Padmavathy, R., Saravanan, T., Mohammed Kasim, S.A., Balachandar, M. Experimental investigation on melting/freezing characteristics of nanocomposite PCMs,Materials Today: Proceedings, 2023

National Journal

Gopinath R.**,Padmavathy R**.,"Controlling a Human Computer Interface (HCI) using Electro-Oculography (EOG) Signal",Indian Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering,Vol.2.No.1.,2014, pp. 1-5,March-2013.

International Conference

1. S Thaiyalnayaki,G Kalaiarasi, M Nithya, **R Padmavathy**,"Classification System on Diabetes Prediction Using Deep Learning Approach", has been accepted in AIP Conference proceedings,Online ISSN:1551-7616, 31.August.2021.

2.**R.Padmavathy**, V.Ranganathan,"Optimizing Support Vector Machine using modified Clonal Selection for Brain Computer Interface",1st International Conference on "Multidisciplinary Research Approach for the accomplishment of Academic Excellence in Higher and Technical Education through Industrial Practices" organized by ISTE Gujarat,10-11 June 2016.

3.**R.Padmavathy**, V.Ranganathan,"Optimizing feature selection and Support Vector Machine using Clonal Selection for Brain Computer Interface",International Conference on Emerging Technologies, Networking and Computational Intelligence,March-2016.

4. **R.Padmavathy**,"Interference Cancellation in Cognitive Network using Beam forming Technique",International Conference on Computing. Communication and Advanced Network - ICCCAN 2013.

Akash R.,**Padmavathy R**."Study of Feature Extraction Techniques using Grey Level Co-Occurance Matrix(GLCM) for Detection and Support Vector Machine for Classification of Different Stages of Benign and Malignant Tumour",National Conference on Innovations in Electronics and Communication Engineering(NCIECE'2020) on 13.3.2020 at Dhanalakshmi Srinivasan Engineering College.

Professional Society Membership

1. ISTE (The Indian Society for Technical Education)Life Member:LM56285
2. IAENG(International Association of Engineers) IAENG Member:287349

Program Attended

FDP/STTP

NPTEL- 4 WEEK ONLINE COURSE PYTHON FOR DATA SCIENCE(ELITE)

5DAYS FDP on RESEARCH-The Journey From Inception To Publishing. (5.02.2024-09.02.2024)Dhanraj Baid Jain College

Two Week -AICTE -ISTE Sponsored fifteen days Induction/Refresher Programme "Application of ML and AL in Electrical Engineering",on 24.05.2021 to 05.06.2021 **,**Organized by Department of Electrical and Electronics Engineering, Kamaraj Engineering College,Viruthunagar.

Conference

2 days International e-Conference Innovations and Research in Marine Electrical and Electronics Engineering ICIRMEEE 2021,Organised by the Department of Electrical and Electronics Engineering,AMET Deemed to be University,Chennai, on 17,18, June 2021.

Webinar

"Fears of Start-up, what to do?"organised by Department of Electrical and Electronics Engineering,RVS College of Engineering and Technology,Coimbatore on 26.5.2021.

Other Details

Patents

Title of Invention: **Fuzzy Logic based Power Supply during Network Failure using Decision Making Technique** , Application no.202141037975 A, Journal No.35/2021,dated 27.08.2021.

1. Resource Person invited for the Faculty Development Program on "SOFT COMPUTING",conducted by Anand Institute of Higher Technology, Chennai, on 18.11.2019.

2. Presented Guest Lecture for II Year ECE and BioMedical Engineering students in the topic "Constant Current Bias" in the subject "Linear Integrated Circuits" at Alpha Engineering College, Chennai on 21.1.2019.

3. Handled Video Lecture for the subject "Analog Electronics" for BSc Electronics students in UGC Lecture Series at EMMRC, ANNA University,Chennai, during the year 2017-2018.

4. HandledVideo Lecture for the subject "Oscillators and Amplifiers" for BSc Physics III Semester students in UGC Lecture Series at EMMRC, ANNA University,Chennai, during the year 2015-2016.