



Mrs.B.Padmavathi

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Mrs.B.Padmavathi is working as an Assistant Professor in the Department of ECE at SRMIST, Ramapuram. She has completed her UG in Electronics and Communication Engineering in the year 2005 from Panimalar Engineering College, Chennai (affiliated to Anna University) and PG in M.Tech - VLSI Design in the year 2007 from Sathyabama University, Chennai. She is pursuing her Ph.D from Sathyabama Institute of Science & Technology, Chennai in the field of Nano technology . She worked for TATA ELXSI Limited as senior Engineer for 3 years and has been serving in this teaching profession for more than 13 years. She has published papers in various journals and presented papers in National and International Conferences. She has published patents and was recognized as NPTEL Star, awarded with NPTEL Motivated Learner by NPTEL, A project funded by MHRD, Govt of India.

Area of Research: Nano Technology, VLSI design.

Selected Publications:

1. Published a paper entitled “A Robust and efficient GQD based bio sensor for wearable applications” in IEEE Digital Xplore, 2022.
2. Published a paper_ entitled “Smart traffic management for pedestrian safety & Smart cities using Digital Image Processing” in AIP Conference Proceedings, Vol.2405, 2022.
3. Published a paper entitled “Opportunistic Spectrum Distribution Protocol for Wireless Sensor Networks” in LNNS - Micro Electronics and communication Engineering, Springer, Vol.373, 2022.

4. Published a paper entitled “Charge inversion in ferromagnetic semiconductor for electrical Treatment” in Materials Today: Proceedings, Elsevier, 2022.
5. Published a paper entitled “Energy-Efficient and Lossless Routing Scheme for Fire Detection in Wireless Sensor Networks“in European Union Digital Library – proceedings, <http://dx.doi.org/10.4108/eai.7-6-2021.2308627>, 2021.
6. Published a paper entitled “BER analysis of 40 Gbps Ro-FSO Communication systems for 5G applications under Fog weather conditions” in IEEE Digital Xplore, <https://doi.org/10.1109/UPCON50219.2020.9376490>, 2021.
7. Published a paper entitled “Automated Gurney System: A new paradigm for Health monitoring system using Internet of Things” in International Journal of Future Generation Communication and Networking, Vol. 13, No. 3, (2020), pp. 3961–3970, ISSN: 2233-7857.
8. Published a paper entitled “A novel rescue bot for borehole accidents” in IOP Conf. Series: Materials Science and Engineering 872 (2020) 012044, IOP Publishing doi:10.1088/1757-899X/872/1/012044, 2020.
9. Published a paper entitled “A Review on the state-of-the-art Nanotechnology Applications, Challenges, Future Framework” in International Journal of Pure and Applied Mathematics. Volume 120 No. 6 2018, 1009-1022 ISSN: 1314-3395 (on-line version) url: <http://www.acadpubl.eu/hub/>
10. Published a paper entitled “Implementation of Charging an Electrical Vehicle using an Adaptive Robot” in International Journal of Pure and Applied Mathematics Volume 118 No. 24 2018 ISSN: 1314-3395 (on-line version).
11. Published a paper entitled “Low Power design techniques and implementation strategies adopted in VLSI circuits” in IEEE Digital Xplore, 2017 DOI: [10.1109/ICPCSI.2017.8392017](https://doi.org/10.1109/ICPCSI.2017.8392017).
12. Published a paper entitled “Design Methodologies and Circuit Optimization Technique for Low power CMOS VLSI Design” in IEEE Digital Xplore, 2017 DOI: [10.1109/ICPCSI.2017.8392016](https://doi.org/10.1109/ICPCSI.2017.8392016).

INTERNATIONAL CONFERENCES:

1. Published a paper entitled “An Effective Body Posture Management System using Novel Intelligent Crutch Tool Mechanism”, in 2nd International Conference on recent advances in electrical, electronics, ubiquitous communication and computational intelligence (raeucci - 2023), technically co-sponsored by the IEEE, held from 19 - 21

April, 2023, organized by the Department of Electronics and Communication Engineering, SRMIST, Kattankulathur, Tamil Nadu, India.

2. Presented a paper entitled “Smart materials: Graphene Quantum dots utilisation for wearable Power generators” in International Conference on Applications in Computational Engineering and Sciences “ organized by VIT, Chennai, during 21st & 22nd Oct 2022.
3. Presented a paper entitled “Smart traffic management for pedestrian safety & Smart cities using Digital Image Processing” in Innovation and Technological Developments in Electronics, Computers and Communication organized by SRM IST, Ramapuram campus, during 17th & 18th May 2021.
4. Presented a paper entitled “IOT Urban surveillance using Deep Learning Algorithm with Mobile-Net Pre trained Model” in Innovation and Technological Developments in Electronics, Computers and Communication organized by SRM IST, Ramapuram campus, during 17th & 18th May 2021.
5. Presented a paper entitled “A Scrutiny on Augmented Reality Techniques based on their competency in the real world” in Recent Advancements in Communication, Electronics and Signal Processing (RACES-19) organized by Velammal Engineering College, Chennai.
6. Presented a paper entitled “Design and Implementation of an Artificial intelligence based autonomous vehicle using machine learning” in international conference on Photonics and High Speed Optical Networks(ICPHON 2018) organized by SA Engineering College, Chennai during 12th and 13th April 2018.
7. Presented a paper entitled “Design and Implementation of High speed digitally controlled oscillator for communication receivers” in international conference on Power electronics and Renewable Energy Systems (ICPERES-2K18) organized by Rajalakshmi Engineering College, Chennai during 4th and 5th April 2018.
8. Published a paper entitled “A Scrutiny on Augmented Reality Techniques based on their competency in the real world” in International Conference on Science Technology Engineering & Mathematics (ICONSTEM-19) organized by Jeppiaar Engineering College, Chennai. Published in International Journal of Applied Engineering Research ISSN 0973-4562 Volume 14, Number 11, 2019 (Special Issue)
9. Published a paper entitled “A Review of 5G Smart Small Cell Networks using Hybrid Beamforming” in National conference on “Signal Processing, Communication & Networking” organized by Sri Venkateswara College of Engineering”, Chennai during 5th and 6th April 2017. Published in International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE) ISSN(Online): 2320-9801 ISSN (Print): 2320-9798 Vol. 5, Special Issue 3, April 2017.

10. Published a paper entitled “Greener Environment Establishment by Means of Sustainable and Renewable Solutions using Digital Repositories in Agricultural Sciences” in IEEE sponsored International conference on Science, Technology, Engineering & Management” organized by Jeppiaar Engineering College, Chennai during 23rd and 24th March 2017. Published in World Applied Sciences Journal, Middle-East Journal of Scientific Research 25 (4): 832-836, 2017 ISSN 1990-9233 © IDOSI Publications, 2017 DOI: 10.5829/idosi.mejsr.2017.832.836

PATENTS:

GRANTED:

1. Design patent entitled “A fitting assembly for tyre inflation and tyre repair “on 9.4.21, Application No.348900-001
2. Design Patent entitled “IoT based portable health monitoring system” on 19.1.22, Application No. 357351 - 001
3. Design Patent entitled “AI based wrist band for women safety” on 17.03.23, Application No. 381660 - 001

PUBLISHED:

1. A patent entitled “Power Sharing and Eco-Friendly Smart Connected Vehicle System Driven by Hybrid Renewable Energy and IoT For Highways” on 10.12.2021. Application No.202141052137 A.
2. A patent entitled” ELK stack for IoT driven smart buildings: effective surveillance and monitoring” on 25.05.23. Application No.202341028666 A.

Professional Bodies:

Member – IAENG, IFERP

Google Scholar Id

<https://scholar.google.com/citations?user=xXWf8skAAAAJ&hl=en>

Scopus Id

<https://www.scopus.com/authid/detail.uri?authorId=57202991854>

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