

A.Gobinath M.E., (Ph.D).,

Assistant Professor/ ECE

Velammal College of Engineering and Technology, Madurai

e-Mail Id:agn@vcet.ac.in; gopigopinath10@gmail.com

Educational Qualification:

2015 **M.E : Communication Systems**
Velammal College of Engineering and Technology, Madurai

2011 **B.E : Electronics and Communication Engineering**
Velammal College of Engineering and Technology, Madurai

Experience in Years: 12 Years

Employment History:

03/03/2021 – Current	Assistant Professor Velammal College of Engineering and Technology, Madurai
05/08/2018 – 27/02/2021	Assistant Professor Vickram College of Engineering, Madurai
01/07/2017 – 31/03/2018	Assistant Professor Velammal College of Engineering and Technology, Madurai
27/07/2011 – 30/06/2017	Junior Research Fellow Velammal College of Engineering and Technology, Madurai

Interested Research Areas: Electromagnetic Interference and Compatibility, RF and
Microwaves, Antennas, Digital Electronics

Funded Research Projects:

- DST Sponsored Research Project: Co Principal Investigator of the research project titled “Investigation of Electromagnetic Phenomenon behind the Temple Kalasam in Indian Historic Temples” for 2 years with Rs.21.96 Lakhs funding
- MSME Sponsored Reserch project : Investigator of the research project titled as “Artificial Intelligence Enabled robotic stacker for Mechanized Distribution of food grains” for 2 years with Rs.8.67 Lakhs

- DRDO Sponsored Research Project: JRF of the research project titled “Reduction Of EMI Emission In High Frequency Circuits Of PCB Configurable By Optimization Techniques” for 3 years 2011-2014 with Rs.21.21 Lakhs funding
- DST Sponsored Research Project: JRF of the research project titled “Conductive concrete blocks from industrial waste as electromagnetic shielding material” for 3 years with Rs.27.54 Lakhs funding

Publications Details:

1. International Journal Publication Details:

1. Gobinath A et.al, (2025) “Design of C-Band Planar Phased Array Antenna for Radar Applications” in ARPN Journal of Engineering and Applied Research. (Scopus Indexed)
2. Gobinath A et.al, (2023) “A Novel Branch line coupler with Defected Ground Structure for Bone Density Measurement Analysis” in ARPN Journal of Engineering and Applied Research. (Scopus Indexed)
3. Gobinath A et.al, (2023) “Reduction of Near-End and Far - End Crosstalk in Parallel High Speed Interconnects using Mitered Meander Shaped DMS” in Materials Today Proceedings. (Scopus Indexed)
4. Gobinath A et.al., (2023) “Reduction of Near-End and Far -End Crosstalk in Microwave and Millimetre Wave Band of parallel Trnsmission Lines using DMS” in Journal of Physics. (Scopus Indexed)
5. Gobinath A, Rajeswari P, Suresh Kumar N, (2020) “A Novel Trident shaped Ultra wide Band Textile Antenna” International Journal of New Innovations in Engineering and Technology, Vol.13, No.3.
6. Gobinath A et.al (2020) “A Compact 2 element planar Canonical MIMO antenna design for IoT Applications” Journal of Xidian University, Vol.14, No.11.
7. Gobinath A and Rajeswari P (2020), “Performance Analysis of Microstriplines Interconnect Structure with Novel Guard Trace as Parallel Links for High Speed Dram Interfaces”, International Journal of Wireless Personal Communications, Springer, Vol. 112, No. 1. (Scopus Indexed)
8. Gobinath A.et.al (2017) “Design of Koch Fractal Antenna for Wireless Applications”, International Journal of Engineering Research & Technology
9. Gobinath A.et.al (2017)“Design of Ultra wideband Textile Antenna for Wearable Applications”, International Journal of Engineering Research & Technology
10. Gobinath A.et.al (2016)“A Novel Trident Incurvature Shape DGS to Suppress Radiated Emission in High Speed Printed Circuit Board”, Circuits and Systems, Vol.7, No.10.
11. Gobinath A.et.al (2016)“Far end crosstalk reduction between parallel microstriplines using U shaped guard trace”, ARPN Journal of Engineering and Applied Sciences, Vol.11. No.5 (Scopus Indexed)

12. Gobinath A.et.al (2016)“Optimization of Electrical Parameters for Crosstalk Reduction between Parallel High Speed Interconnects Using Particle Swarm Optimization”, International Journal of Electrical, Electronics and Computers.
13. Gobinath A.et.al (2015)“Signal Integrity Analysis of High Speed Interconnects In SATA Connector”, International Journal of Applied Engineering Research, Vol.10.No.7. (Scopus Indexed)
14. Gobinath A.et.al (2014)“Investigation of Electromagnetic Coupling Between Microstrip Lines with Defective Ground Structures”, International Journal of Applied Engineering Research, Vol.9.No.21. (Scopus Indexed)
15. Gobinath A.et.al (2014)“Analysis of EMI Shielding Effectiveness of Building Materials”, Electrical Engineering: An International Journal.

2. International Conference Presentation Details:

1. Gobinath A., et.al., “Low-Profile Dual-Band Antenna for C-Band and X-Band Wireless Communication”, International Conference on “Device Intelligence, Computing and Communication Technologies” (DICCT-2025), organized by Graphic Era (Deemed to be University), Uttarakhand, March 2025.
2. Gobinath A., et.al., “Design of Compact Dual-Band Antenna for IOT Applications”, International Conference on Integrated Circuits and Communication Systems (ICICACS - 2025), organized by H.K.E. Society's Sir M Visvesvaraya College of Engineering, Raichur, February 2025.
3. Gobinath A., et.al., “Design and Optimization of Leaf-Inspired Antenna for Enhanced Sub-6 GHz 5G Performance”, International Conference on Integrated Circuits and Communication Systems (ICICACS - 2025), organized by H.K.E. Society's Sir M Visvesvaraya College of Engineering, Raichur, February 2025.
4. Gobinath A., et.al., “AI-Pollinators for Blueberry Farming: Enhancing Cross-Pollination Efficiency Through Autonomous Systems”, IEMENTECH -2025, organized by Institute of Engineering & Management, Kolkata, February 2025.
5. Gobinath A., et.al., “Design and Implementation of Compact Multiband Bandpass Filters Using Coupling Resonators”, Emerging Electronics and Automation, organized by National Institute Of Technology, Silchar, December 2024.
6. Gobinath A., et.al., “Design A Compact Slot-Loaded Microstrip Antenna for Wearable and IoT Applications”, Emerging Electronics and Automation, organized by National Institute Of Technology, Silchar, December 2024.
7. Gobinath A., et.al., “Parkinson's Disease Detection from Spiral and Wave Drawings using CNN - RNN With GSM alert”, International Conference on Smart Electronics and Communication Systems 2024, organized by Indian Institute of Information Technology, Kottayam, December 2024.
8. Gobinath A., et.al., “Identification of Toxins and Pathogen in Foods Using ML and CV”, International Conference on Smart Electronics and Communication Systems 2024, organized by Indian Institute of Information Technology, Kottayam, December 2024.
9. Gobinath A., et.al., “Bandwidth Enhancement of Microstrip Filtenna using Defected Ground Structure (DGS) for IoT Applications”, International Conference on

Integration of Emerging Technologies for the Digital World 2024, organized by RMD Engineering College, Chennai, September 2024.

10. Gobinath A., et.al., "Extensive Signal Integrity Analysis for High-Speed Printed Circuit Boards in Advanced IoT Applications", IEEE Flagship International BIT CONFERENCE (BITCON-24), organized by BIT Sindri, Jharkhand, December 2024.
11. Gobinath A., et.al., "Progress and Perspectives of Augmentative and Alternative Communication in the Indian Context", IEEE Flagship International BIT CONFERENCE (BITCON-24), organized by BIT Sindri, Jharkhand, December 2024.
12. Gobinath A., et.al., "From Data to Defense: A Deep Learning Approach to Automated Wildlife Monitoring and Anti-Poaching Efforts", IEEE Flagship International BIT CONFERENCE (BITCON-24), organized by BIT Sindri, Jharkhand, December 2024.
13. Gobinath A., et.al., "Automated Mushroom Species Identification and Prediction Using Image Processing and Machine Learning", IEEE Flagship International BIT CONFERENCE (BITCON-24), organized by BIT Sindri, Jharkhand, December 2024.
14. Gobinath A., et.al., "A Comprehensive Hybrid CNN-LSTM Deep Learning Model for Accurate Landslide Prediction", IEEE Flagship International BIT CONFERENCE (BITCON-24), organized by BIT Sindri, Jharkhand, December 2024.
15. Gobinath A., et.al., "Portable Field Device for Real-Time Soil Fertility Prediction Using CatBoost", International Conference on Innovative Computing, Intelligent Communication and Smart Electrical systems, organized by St. Joseph's Institute of Technology, Chennai, December 2024.
16. Gobinath A., et.al., "SMS Guard: Enhancing Spam Detection Using Multinomial Naive Bayes for Secure Communication", International Conference on Sustainable Communication Networks and Application, organized by Bharath Niketan Engineering College, Theni, December 2024.
17. Gobinath A., et.al., "Intelligent Street Light Management and Monitoring System with IoT Integration", International Ieee Conference On Computing, Communication And Networking Technologies (ICCCNT) organized by IIT - Mandi, Himachal Pradesh, June 2024
18. Gobinath A., et.al., Next-Generation Anomaly Detection Framework Leveraging Artificial Intelligence for Proactive Credit Card Fraud Prevention and Risk Management", International Ieee Conference On Computing, Communication And Networking Technologies (ICCCNT) organized by IIT - Mandi, Himachal Pradesh, June 2024
19. Gobinath A., et.al., Design and Simulation of a Low Phase Noise Oscillator using substrate Integrated Waveguide without Metallic Vias" International Conference for Intelligent Technologies (CONIT 2024) organized by K.L.E. Institute of Technology (KLEIT), Bangalore June 2024.
20. Gobinath A., et.al., "Design of Low phase noise Oscillator Using SIW" in International Conference VInCE'24 organized by Velammal College of Engineering and Technology, Madurai on 17.05.2024 & 18.05.2024.
21. Gobinath A., et.al., "Design of a Compact Multiband Bandpass Filter Using Coupling Resonator for Wireless Applications" in International Conference VInCE'24 organized by Velammal College of Engineering and Technology, Madurai on 17.05.2024 & 18.05.2024.

22. Gobinath A., et.al., "Design and Implementation of Power Divider and Combiner Using Resonator" in International Conference VINCE'24 organized by Velammal College of Engineering and Technology, Madurai on 17.05.2024 & 18.05.2024.
23. Gobinath A., et.al., "Hybrid Curvilinear Defected Microstrip Structure to Reduce the Electromagnetic Coupling in PCB" in International Conference INOCONF 2024 organized by Sai Vidya Institute of Technology, Bengaluru, March 2024.
24. Gobinath A., et.al., "Hybrid 9-Port Power Divider and Combiner for Enhanced Wireless Energy Harvesting in Passive RFID Tag Systems" in International Conference INCOS 2024, organized by Kalasalingam University, March 2024.
25. Gobinath A., et.al., "Emotional Harmony through Deep Learning: A Facial Expression-Based Music Therapy" in International Conference INCOS 2024, organized by Kalasalingam University, March 2024.
26. Gobinath A., et.al., "Design and Development of Multifunction Robotic Arm" in International Conference INCOS 2024, organized by Kalasalingam University, March 2024
27. Gobinath A., et.al., "Autonomous Subsurface Exploration and Extraction System: Robotic Arm-Assisted Borewell Rescue Initiative" in International Conference INCOS 2024, organized by Kalasalingam University, March 2024.
28. Gobinath A., et.al., "Voice Assistant with AI Chat Integration using OpenAI" in International Conference INCOS 2024, organized by Kalasalingam University, March 2024.
29. Gobinath A., et.al., "Secure Wireless Traffic Signal Controller in PeakHour" MRTM - 2023 organized by New Horizon College of Engineering September 2023
30. Gobinath A., et.al., "Design and Analysis of Stub Loaded Serpentine with U shaped DGS Directional Coupler for BDM Analysis", in 2nd Springer International conference (ICNGCS'23), organized by PSGiTech, Coimbatore, March 2023.
31. Rajeswari P, Suresh Kumar N, Gobinath A., "Reduction of Near-End and Far -End Crosstalk in Microwave and Millimetre Wave Band of parallel Transmission Lines using DMS" in National conference, NCOCS-2022, organized by National Institute of Technology, Puducherry, December 2022.
32. Gobinath A., et.al. "A Novel Crosstalk Reduction Technique for Trace Suspension Assembly Interconnects in Hard Disk Drive", International Conference on "Electromagnetic Interference and Compatibility" (INCEMIC 2016), Society of EMC Engineers (India), 2016
33. Gobinath A., et.al. "Analysis of Electromagnetic coupling between two non-parallel Micro strip lines on a High Speed Printed Circuit Board", International conference on Innovations in Electronics, Communications and Computing (ICIECC'14), 2014.
34. Gobinath A., et.al. "Analysis of EMI shielding effectiveness of Building materials", International conference on Innovations in Electronics, Communications and Computing (ICIECC'14), 2014.
35. Gobinath A., et.al. "Crosstalk Reduction in PCB Traces using Various Trace Configurations", International Conference on Electromagnetic Interference and Compatibility 2012
36. Gobinath A., et.al. "Parameter extraction of planar transmission line structures using various numerical approaches", International Conference on Electromagnetic Interference and Compatibility 2010

3. National Conference Presentation Details:

1. P.Rajeswari., et.al.“Design of Ultra wideband Textile Antenna for Wearable Applications”, National Conference on innovation in Electronics, Communication and Computing (NCIECC’17), 2017
2. P.Rajeswari., et.al.“ Design of Koch Fractal Antenna for Wireless Applications”, National Conference on innovation in Electronics, Communication and Computing (NCIECC’17), 2017

4. Book / Book Chapter Publication Details:

1. Rajeswari P, Suresh Kumar N, Gobinath A, Anandan M, “ Machine Vision And Industrial Robotics In Manufacturing” Taylor & Francis Group, 2024. (**Scopus Indexed**)
2. Rajeswari P et.al., “ Internet of Things-Integrated Robotics in Manufacturing” Taylor & Francis Group, 2024. (**Scopus Indexed**)
3. Rajeswari P, Suresh Kumar N, Gobinath A, “Robotic Applications in Real-Time Healthcare Systems” Taylor & Francis Group, 2024. (**Scopus Indexed**)
4. Rajeswari P, Suresh Kumar N, Gobinath A, “Unleashing the power of industry 5.0” IGI Global., 2024 (**Scopus Indexed**)
5. Rajeswari P, Gobinath, A., Devi, M., Srinivasan, A., Devi, P., “AI enabled Robots”, IGI Global., 2024 (**Scopus Indexed**)
6. Rajeswari P, Gobinath A, “Industrial Revolution (Industry 5.0) and Artificial Intelligence technology” IGI Global., 2024. (**Scopus Indexed**)
7. Rajeswari P, Suresh Kumar N, Gobinath A, “Wearable sensor and AI algorithm for Natural Disaster” IGI Global., 2024. (**Scopus Indexed**)
8. Gobinath A, Rajeswari P., “IoT devices for natural disasters: IoT technologies for natural disaster management” 2024, pp. 121–139 (**Scopus Indexed**)
9. Rajeswari P, Suresh Kumar N, Gobinath A, “ANN Model for Predicting the Natural Disaster” IGI Global., 2024. (**Scopus Indexed**)
10. P.Rajeswari, N.Suresh Kumar, A.Gobinath “Suppression Of Radiated Emission In High Speed Printed Circuit Board”, ISBN: 978-620-3-58922-, LAP Lambert Academic Publishing, New York,2021
11. P.Rajeswari, N.Suresh Kumar, A.Gobinath (2020) “Capsule Antenna for Medical Application” ISBN: 978-620-0-31810-7, Lab Lambert Academic Publishing

12. P.Rajeswari, A.Gobinath (2019) “Advances in Engineering Technology – Mitigation Techniques to Reduce Crosstalk in SATA Interconnects” ISBN: 978-93-5335-513-5, Akinik Publications
13. P.Rajeswari, N.Suresh Kumar, A.Gobinath (2017) “Signal Integrity In Mother Board – Interconnect Theory and Design” ISBN: 978-3330330931, Lab Lambert Academic Publishing

5. Patent

1. **Granted a patent Titled as “Battery Management System for Electric Vehicles with Real-Time Monitoring”**

FDP Attended

S.No	Title of FDP	Organizers	Date
1.	Outcome Based Education for Effective Learning and Teaching	AMET UNIVERSITY	One week 19th July - 27th July 2023
2.	Realizing the benefits of Academic Research	SreeSakthi Engineering College, Coimbatore	One week 10.07.2023 – 15.07.2023
3.	Empowering Educators: AI in Robotics and Automation for Innovative Initiatives in the Digital Era.	Sri Krishna College of Engineering and Technology	One Week 04.12.2023 – 08.12.2023
4.	Microsoft Power BI Data Analyst Associate	ICT Academy at Velammal College of Engineering and Technology	18 Dec 2023 to 22 Dec 2023
5.	Emerging Trends in Artificial Intelligence and Machine Learning	Govt College of Engineering, Bodinayakanur	04.12.2023 to 08.12.2023
6.	Advanced Nano Material and their Applications	Vellore Institute of Technology, Chennai	24.06.2024 to 28.06.2024
7.	Recent Trends in Computing 4.0	Vishwakarma Institute of Technology, Pune	8.07.2024 – 13.07.2024
8.	Sustainable Development in Industry 5.0 with AI	Haldia Institute of Technology, West Bengal	05.08.2024 – 09.08.2024

Google Scholar report:



A. Gobinath
Assistant Professor
Electromagnetic Interference
Antenna

	All	Since 2020
Citations	108	106
h-index	6	6
i10-index	1	1

Gobinath A