

Dr. K. KAYALVIZHI				
Designation:	Assistant Professor			
Qualification:	M.E., Ph.D.			
Area of specialization:	Antennas and RF			
Experience :	Industrial Experience	Teaching Experience		
	Nil	4.7 Year		
Number of workshop / FDP attended:	Number of Workshops	Number of FDPs		
	14	09		
Publications:	Conference		Journal	
	Natio nal	International	National	International
	-	4	-	8
Patents:	National		International	
	02		-	
Professional Body Membership:	IEEE Member - 99458434			
Educational Qualifications:	Course/Degree	Board/University/College	Year	
	Ph.D. (Faculty of information and communication)	Anna University, Chennai.	2024	
	M.E. Communication system	Saranathan college of Engineering, Anna University, Trichy.	2011	
	B.E. ECE	Shri Angalamman College of Engineering and Technology, Anna University, Chennai	2009	

Achievements:

- Appreciated for the role of mentor by IIT Madras for the NPTEL online certification course “Machine learning and Deep Learning -Fundamentals and Applications”.
- Appreciated for served as an Academic Mentor in the Career Mentoring Program (CMP) 2025, organized by the IEEE India Council - Industry Academia Young Professionals Committee (IAYPC), conducted from 21 July 2025 to 31 December 2025.
- Contributed as peer reviewer in Thiagarajar Journal of Engineering, Science, Design and Technology (online ISSN: 3107-5630) in December 2025
- Selected as one of the 174 IEEE mentor among 1100 applicants for student career guidance for the year 2025.
- Contributed as Reviewer for the 2024 International Conference on Communication, Computing and Internet of Things, held on 17th and 18th April 2024.
- Appreciated for volunteered as proctor to guide and oversee competing teams for the IEEE Xstream 18.0 programming competition that hosted for +19000 participants on 26 October 2024.

Research and Development Details

- ❖ Centre for Research, Anna University, Chennai recognized as a Supervisor (Ref. No: 4690026) for guiding Ph.D. and M.S. (By Research) scholars of this university under the Faculty of Electronics & Communication Engineering in the field of Antennas, RF & Microwave, Wireless Communication.

Program Coordinated / Organized:

- ❖ Coordinated the Guest Lecturer on SONET/SDH in the Department of ECE at Sri Sairam Engineering College on 31.10.2025
- ❖ Organized the Five days Faculty Development Programme on the topic of “Perspective of 6G towards Next-Gen Communication”, in the Department of ECE at Sri Sairam Engineering College from 7th April 2025 to 11 April 2025
- ❖ Coordinated the National Science Day in the Department of ECE at Sri Sairam Engineering College on 3.4.2025
- ❖ Coordinated the Seminar on Non-Linear Models in R Programming Applications in the Department of ECE at Sri Sairam Engineering College on 13.11.2024

Publication Details:

International Journals

1. Kayalvizhi, K & Ramesh, S 2020, 'Design and Analysis of Reactive Load Dipole Antenna using Genetic Algorithm Optimization', Applied Computational Electromagnetics Society Journal, vol. 35, no. 3, pp. 279-287. [Science Citation Index Expanded, Impact Factor: 0.414
2. Kayalvizhi, K & Ramesh, S 2023, 'A novel MIMO antenna with switchable UWB/5G modes for vehicular terminals', Microwave and Optical Technology Letters, vol.65, no.9, pp.2640-2645. DOI: 10.1002/mop.33760. [Science Citation Index Expanded, Impact Factor: 1.311].
3. Tamilselvi, T., Kayalvizhi, K., Rajapandian, B & Nithyarani, N 2019, "A research on electronic component wrecker using electro-magnetic pulse (EMP)", International Journal of Engineering and Advanced Technology, vol.8, no. 6, pp. 3641–3645.
4. Manikandan J, Kayalvizhi K, Yuvaraj Nachimuthu, Jeena R, 2024, "AROA based Pre-Trained Model of Convolutional Neural Network for voice pathology Detection and classification", Journal of Machine and Computing, vol.4, no.2, pp.463-471
5. Kayalvizhi K, Kanchana S, Silvia Priscila S, Padmavathy C, Banda SNV Ramana Murthy, Veeramani Thangavel, 2024, "optimized CNN -BiLSTM with Attention: A High-Performance model for predicting heart disease using cleveland and framingham datasets", Journal of Machine and Computing, vol.4, no.4, pp.1195 – 1205.
6. K Kayalvizhi, S Ramesh, 2025, Performance of optimized hexagonal slotted patch antenna design for enhanced sub -6 5G wireless system", ICTACT Journal on Microelectronics, Vol.11, No.1, pp.2005 - 2010.
7. K. Anbumani and K. Kayalvizhi, 2025, Fuzzy Logic And Deep Reinforcement Learning-Driven MOSFET System For Sustainable Waste Management And Environmental Remediation", ICTACT Journal On Microelectronics, Vol. 11, no, 03,pp. 2170-2176
8. K. Anbumani and K. Kayalvizhi, 2025, "A Cascaded Hierarchical Gray Wolf Optimizer For Multi-Objective Optimization In Integrated Renewable Energy Systems", ICTACT Journal on soft computing, Vol. 16, no, 02 ,pp. 3938-3943

Book Chapters

1. Kayalvizhi, K & Ramesh, S 2019, A Broadband LR Loaded Dipole Antenna for Wireless Communication, Springer – Lecture notes on Data Engineering and Communication Technologies, vol. 35, pp.1415-1426. [E-Book ISBN 978-3-030-32150-5, DOI: 10.1007/978-3-030-32150-5]

International Conferences

1. Kayalvizhi, K & Ramesh, S 2019, ‘A Broadband LR Loaded Dipole Antenna for Wireless Communication’, International Conference on Emerging Current Trends in Computing and Expert Technology, pp. 201-206.

2. Kayalvizhi, K & Ramesh, S 2018, ‘Analysis of RL Loaded Dipole Antenna using Genetic Algorithm for Wireless Communication’, International Conference on Smart Structures and Systems, pp.60-65.

3. Kayalvizhi, K & Ramesh, S 2017, ‘Penta Band Slot Antenna for Wireless Communications’, International conference on Engineering, Energy & Environment, pp.176-181.

4. Kayalvizhi, K & Ramesh, S 2017, ‘A High-Efficiency Broadband Rectenna for Wireless Energy Harvesting’, Proceedings of the international conference on Newer Engineering Concepts and Technology.

Citation Indices:

Reference:

https://scholar.google.com/citations?hl=en&tzom=-330&user=mO3WM_YAAAAJ

Identifiers: Web of Science Researcher ID: [AIB-2735-2022](#) & ORCID: 0000-0003-4507-3126

Patents Published/Granted

1. Title of the invention: Envirocare: Real Time Vehicle Emission Monitoring

Type of Patent: Application

Application Number: 202541046751

Date of filing of Application :15/05/2025.

Publication Date: 13/06/2025.

2. Title of the invention: Envirocare: Reconfigurable UWB /5G Mode MIMO Antenna

Type of Patent: Design

Design Number: 420098-001

Date of filing of Design :14/06/2024.

Granted Date: 27/08/2025.

Online Certification Courses details

- ❖ Successfully completed 8 Modules of National Initiative of Technical Teachers Training (NITTT) and obtained AICTE certification on September 2025.
- ❖ Successfully completed the APPLE teacher Training Course on 18 Nov 2025 at Sri Sairam Engineering College.
- ❖ Successfully completed the certificate course on Panchayat administration and rural development schemes conducted by State Institute of Rural development and panchayat raj, Government of Tamil Nadu, Maraimalai Nagar on Nov 2025.
- ❖ Jan-April 2024: NPTEL 4- Weeks Course on “Design Thinking (A Primer)” by Prof. Aswin Mahalingam and Prof Bala Ramadurai, IIT Madras.
- ❖ Jul-Oct 2024: NPTEL 12- Weeks Course on “Digital Image Processing” from IIT Kharagpur.
- ❖ Jul- Oct 2024: NPTEL 12- Weeks Course on “Machine learning and Deep Learning - Fundamentals and Applications”, from IIT Guwahati.
- ❖ Jan- Apr 2025: NPTEL 12- Weeks Course on “Network Security”, from IIT Bombay.
- ❖ Jan- Apr 2025: NPTEL 12- Weeks Course on “Principle of Communication system 1”, from IIT Kanpur.

Workshops / FDP Attended [23 Nos]

- ❖ Participated in five days international online workshop on smart antenna design through CST simulation software”, Organized by the department of electronics and communication engineering, Chennai, from 6th October 2025 to 10th October 2025.
- ❖ Participated in 6 days online Faculty development program on “IOT in focus: Emerging trends and Real-World challenges”, held from 20.1.2025 to 25.01.25 hosted by Sri Sairam Engineering College.
- ❖ A Successfully completed the faculty development Programme for the Network Security course organized by NPTEL – AICTE, IIT Madras from Jan – Apr 2025
- ❖ Participated in five days faculty development Programme on Problem solving modelling and simulation tools for Electronics and communication Engineering organized by KLN College of Engineering, Pottapalayam, Sivaganai District from 18.06.2024 - 22.06.2024.
- ❖ A Successfully completed the faculty development Programme for the Digital Image Processing course organized by NPTEL – AICTE, IIT Madras from Jul– Oct 2024
- ❖ A Successfully completed the faculty development Programme for the Machine Learning and Deep Learning -Fundamentals and Applications course organized by NPTEL – AICTE, IIT Madras from Jul – Oct 2024
- ❖ Participated in Webinar on Utilization of CHATGPT tool organized by Department of Electrical and Electronics Engineering, C. Abdul Hakeem College of Engineering and technology, Vellore on 20 march 2024.
- ❖ Participated in the SERB Sponsored International Workshop on “Antenna Design Techniques for wireless power transfer: current trends and future prospects”, organized by the department of Electronics and Communication Engineering, Sri Krishna college of Technology, Coimbatore during 8th and 9th march 2024.
- ❖ A Successfully completed the faculty development Programme for the Design Thinking- A primer course organized by NPTEL – AICTE, IIT Madras from Jan – Feb 2024.
- ❖ Participated in Distinguished Lecture on It is Antenna Engineering which transformed the Technology on 25 March 2023 at Sastra Deemed University, Thanjavur.

- ❖ Participated in five-day FDP on Design of high frequency antennas for real time Applications (DHARA-2023) jointly organized by the Department of ECE of GMR Institute of Technology, Rajam and the Department of ECE of VR Siddharath Engineering College, Vijayawada, Andhra Pradesh on 14-18 March 2023.
- ❖ Participated in IEEE Madras Section sponsored Five-day faculty development Programme on Recent Trends in 5G Communication Networks from 26.12.2022 to 30.12.2022 at Sri Sai Ram Engineering College, Chennai.
- ❖ Attended a Webinar on Writing Scholarly Publication held on 22 September 2021 at Central Library of RVS Technical Campus-Coimbatore.
- ❖ Participated in One-day webinar on “Study of Antenna Design and Analysis of Simulated Results” on 21.05.2020 at National College of Engineering, Tirunelveli.
- ❖ Attended CST webinar in association with SVCE - CST - 3D EMI/ EMC simulation software and antenna designing with SI/PI by Dassault Systems on 18-19 May 2020.
- ❖ Participated in the 3 Day webinar Series on Recent Trends and Research Opportunities in 5G & beyond held on May 25th – 27th, 2020 at IE (I), Kattankulathur Local Centre & Department of Electronics & Communication Engineering, SRM Institute of Science and Technology, Kattankulathur
- ❖ Attended webinar on " Antennas in Biomedical Applications & MIMO Technology " held on 24-06-2020 at The Department of Electronics & Communication engineering in association with IEI (ECE) & ECSA.
- ❖ Participated Webinar in Planar Transmission Line for Antenna Applications held on 7th November 2020 at EEE-APS society of Kongu Engineering College, Perundurai in collaboration with IEEE-APS Madras chapter.
- ❖ Attended the one-day Professional Development Programme on “Scholarship and Research”, held on 17th February, 2018 at IEEE Madras Section, Gandhi Mandapam Road, Chennai.
- ❖ Attended the Six Days Faculty Development Program on Antenna Design and Measurement Techniques during 10-15 December 2018 at SSN College of Engineering.
- ❖ Attended a National Workshop on 3D EM Simulation Technique for Antenna and Filter using CST Studio Suite and ADS Software held on 19th August 2017 at Shri Venkateswara College of Engineering.

- ❖ Attended the technical session of 30th GISFI Standardization Series Meeting and IEEE 5G Summit held on 16-17 November 2017 at SRM University, Kattankulathur.
- ❖ Participated in the two days workshop on Advanced Antenna Design and Applications held on 26-27 August 2016 at SRM University.