

## BIO DATA



**Name:** Dr.R.Ramasamy

**Designation:** Assistant Professor-II

**Department:** Electronics and Communication Engineering

**Address for Communication:** , Ramana Nagar, R.R Nagar  
Post, Rajapalayam - 626108

**Email:** [ramasamy@ritrjpm.ac.in](mailto:ramasamy@ritrjpm.ac.in)

**Mobile Number:**

Google Scholar link:

<https://scholar.google.com/citations?user=uLkCO4EAAAAJ&hl=en>

ORCID: <https://orcid.org/0000-0002-7758-1283>

### 1. Educational Qualification

Degree	Branch / Specialization	Institute/University	Year of Passing
B.E	ECE	National Engineering College, Kovilpatti/ Anna University, Tirunelveli.	2011
M.E	VLSI Design	Velammal College of Engineering and Technology, Madurai/ Anna University, Chennai.	2014
Ph.D.	Antennas	Vel Tech Rangarajan Dr.Sagunthala R & D Institute of Science and Technology, Chennai. (Deemed to be University)	2025

### 2. Professional/ Industry Experience :

S.No	Designation	Institution/ Organization	Period	
			From	To
1	Assistant Professor-II	Ramco Institute of Technology	01.07.2024	Till date
2	Assistant Professor	Ramco Institute of Technology	01.07.2023	30.06.2024
3	Assistant Professor	Vel Tech Rangarajan Dr.Sagunthala R & D Institute of Science and Technology, Chennai (Deemed to be University)	13.06.2017	31.05.2023
4	Assistant Professor	Latha Mathavan Engineering College, Madurai	03.01.2015	31.05.2017

Updated as on 24.07.2023

### 3. Research Interest : Antennas, Machine Learning and IoT

## 4. Publications

### 4.1 Journal Publications

1. Venkatesh P, Ponnrajakumari M, Narmadha TV, **Ramasamy R**, Radhika SA, Padmavathy TV. On attempting to improve the reliability in body-centric communications using fully flexible diversified quad-port MIMO antenna backed with FSS. *International Journal of Microwave and Wireless Technologies*. Published online 2025:1-23. doi:10.1017/S1759078725102602. . (WoS, Scopus, Anna University annexure D).
2. **Ramasamy R.**, V, R., & Jain, R. (2025). Machine Learning Assisted mm-Wave MIMO Antenna Design with High Isolation for 5G Applications. *IEEE Latin America Transactions*, 23(12), 1325–1334. Retrieved from <https://latamt.ieeeer9.org/index.php/transactions/article/view/9776>. (WoS, Scopus, Anna University annexure D).
3. **Rajendran Ramasamy**, Samidoss Chinnapparaj, Vellaichamy Rajavel, Venkatesh Pandi Ravichandran, Abbas Ali Farithkhan, and Amanulla Yasmin Jenifer, "Machine Learning Assisted Monopole Antenna Optimization Using EONNC and SFIS Algorithm for Wearable Applications," *Progress In Electromagnetics Research C*, Vol. 160, 225-234, 2025. doi:10.2528/PIERC25061607.(Scopus)
4. **Rajendran Ramasamy**, Maria Anto Bennet, and Abbas Ali Farithkhan, "Machine Learning Assisted Intelligent Antenna Parameters Estimation Using EOLRKC and SFIS Algorithms," *Progress In Electromagnetics Research Letters*, Vol. 125, 67-73, 2025. doi:10.2528/PIERL25012002.(Scopus)
5. Nanmaran R, Vijai Meyyappan Moorthy, Srinath R, **Ramasamy R**, Imran Javeed S, Srimathi S "Image Enhancement in Fundus Images using Modified Frangi Vesselness Filter in comparison with Hessian and Gaussian Filter," 2024 2nd International Conference on Networking and Communications (ICNWC), Chennai, India, 2024, pp. 1-11, doi: 10.1109/ICNWC60771.2024.10537320.(Scopus)
6. **Rajendran Ramasamy**, and Maria Anto Bennet, "Optimizable KNN and ANFIS Algorithms Development for Accurate Antenna Parameter Estimation," *Progress In Electromagnetics Research C*, Vol. 142, 207-218, 2024. doi:10.2528/PIERC23091403.(Scopus)
7. Dr.K.E.Purushothaman, **R.Ramasamy**, Srinidhi Sundaram, Srimathi S, & Dr.V.Velmurugan. (2024). Identification Of A Person Using Multi-Metric In Profound Learning. *Educational Administration: Theory and Practice*, 30(4), 9025–9030. <https://doi.org/10.53555/kuey.v30i4.3018>.(Scopus)
8. A. Farithkhan, E. D. Kanmani Ruby, M. Prabha, S. Manju, **R. Ramasamy** and K. M. Mahesh, "Improving FANET Communication with a QoS Optimized Location-Aided Routing Protocol," 2024 5th International Conference on Smart Electronics and Communication (ICOSEC), Trichy, India, 2024, pp. 630-635, doi: 10.1109/ICOSEC61587.2024.10722211. (Scopus)
9. R. V, D. Ghoshal, **Ramasamy R**, A. Farithkhan, "Next-Generation Wearable Antenna: Optimized Multi-Band Performance for Advanced Wireless Systems and Applications," 2024 5th International Conference on Circuits, Control, Communication and Computing (I4C), Bangalore, India, 2024, pp. 344-349, doi: 10.1109/I4C62240.2024.10748486. (Scopus)
10. **Rajendran Ramasamy**, and Maria Anto Bennet, "An Efficient Antenna Parameters Estimation Using Machine Learning Algorithms," *Progress In Electromagnetics Research C*, Vol. 130, 169-181, 2023. doi:10.2528/PIERC22121004. (Scopus)
11. **R.Ramasamy**<sup>1</sup> A Compact UWB MIMO Antenna for IoT Applications 2021 *Innovations in Power and Advanced Computing Technologies (i-PACT)*, IEEE. (Scopus)
12. **R.Ramasamy**<sup>4</sup> Rapid Raise on Cyber Attacks due to Covid'19 over the Globe: A Survey "Turkish Online Journal of Qualitative Inquiry (TOJQI)". Volume 6, July 2021: 6199- 6208.
13. **R.Ramasamy**<sup>1</sup> Design and Analysis of Multiband Bloom Shaped Patch Antenna for IoT

- Applications “Turkish Journal of Computer and Mathematics Education”. Vol.12 No.3 (2021).
14. **R.Ramasamy**<sup>1</sup> “Remote Sensing Using Hybrid Access Cognitive Femto cell Networks in Wireless Communication” International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-9, July 2019. (Scopus)
  15. **R.Ramasamy**<sup>2</sup> “Self-motivated Frequency Selection method for Mobile Security” International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-9, July 2019.
  16. **R.Ramasamy**<sup>2</sup> “An optimal energy consuming protocol for localization using ANFIS residual energy for MANET” International Journal of Engineering & Technology, 7 (2) (2018) 667-673. (Scopus)
  17. **R.Ramasamy**<sup>2</sup> “Implementation of IoT In Smart Irrigation System Using Arduino Processor” International Journal of Civil Engineering & Technology (IJCET), ISSN: 0976 - 6316, Volume-8 Issue-9, 20-Oct-2017. (Scopus)

#### 4.2 Conference Publications

1. **Ramasamy, R.,**( 2025) "A miniaturized inspired dual band Microstrip Patch antenna for Wireless Applications" in the International Conference on Smart Technologies in Electronics and Photonics Systems (ICSTEPS2025) organized by the Department of ECE, Ramco Institute of Technology, Rajapalayam held on 3rd & 4th, April 2025.
2. **Ramasamy, R.,**( 2025) " Compact Microstrip Patch Antenna For Wearable Applications" in the International Conference on Smart Technologies in Electronics and Photonics Systems (ICSTEPS2025) organized by the Department of ECE, Ramco Institute of Technology, Rajapalayam held on 3rd & 4th, April 2025.
3. **Ramasamy, R.,**( 2024) “Improving Fanet Communication with A QOS-Optimized Location-Aided Routing Protocol” 5th International Conference on Smart Electronics and Communication ICOSEC 2024, 18-20, September 2024, organized by “Kongunadu College of Engineering and Technology”, in association with IEEE.
4. **Ramasamy, R.,** Aishwarya, B. (2023). Swarm Intelligence-Based Clustering and Routing Using AISFOA-NGWO for WSN. Third Congress on Intelligent Systems. **CIS 2022** held during September 05-07, 2022.
5. **Ramasamy, R.,** (2023). A Novel Efficient AI-Based EEG Workload Assessment System Using ANN-DL Algorithm. Proceedings of the International Conference on Paradigms of Computing, Communication and Data Sciences. Algorithms for Intelligent Systems **PCCDS 2022** held during 05-07-2022.
6. **Ramasamy, R.,** “A Compact UWB MIMO Antenna for IoT Applications”, 3rd IEEE International Conference on Innovations in Power and Advanced Computing Technologies, **i-PACT2021** jointly organized by Faculty of Engineering, Universiti Malaya, Kuala Lumpur, Malaysia & School of Electrical Engineering, Vellore Institute of Technology, Vellore, India., 27 – 29, November 2021,IEEE publication.
7. **Ramasamy, R.,** “A Compact dual band E shaped Circular Patch Antenna for IoT Applications” during the Third International Conference on Engineering Facilities Maintenance and Management Technologies (**EFM2T’21**) organized by Botswana International University of Science & Technology, Botswana between 28th and 29th October 2021.
8. **Ramasamy, R.,** “Energy Efficient ACO-DA Routing Protocol based on IoEABC-PSO Clustering in WSN”, **Congress on intelligent system 2021**, September 4-5, 2021, Springer publication. (**Received best paper award**).
9. **Ramasamy, R.,** “Design and Analysis of Multiband Bloom Shaped Patch Antenna for IoT Applications”, 2nd International Conference on Modern Research and Computation in Electrical Technology (**ICMRCET-2020**), 7 th and 8th of Jan 2021, CMR College of Engineering & Technology, Hyderabad, Telangana, 501 401(**Received best paper award**)
10. **Ramasamy, R.,** “Performance Comparsion of Image Denoising in Natural Images Using Tetrolet Transform with Shrinkage Techniques” in the **International conference of ICIECC 2014**, Velammal College of Engineering and Technology, at Madurai, on April 10, 2014.

11. **Ramasamy, R.**, “Performance Comparison of Image Denoising in Natural Images Using Adaptive HAAR Wavelet Transform with Shrinkage Techniques” **in the International conference of ICACT 2014**, J.K.K.NATTRAJA College of Engineering and Technology at Kumarapalayam, on March 8, 2014.
12. **Ramasamy, R.**, “Efficient Noise Removal in Gray Scale Image using Tetrolet Transform ” **in the Second International conference of ICDASDC 2013**, K.L.N.College of Information Technology at Madurai, on Nov 29, 2013.

#### 4.3 Book/Book chapter publications:

- 1 **Ramasamy, R.**, Arunachala Perumal, C., Ramachandra, B.C., Srikusan, A. and Vijayan, S. (2026). Design and Analysis of Multiband Microstrip Patch Antenna for IoT Applications. In Industrial Internet of Things and Advanced Techniques for Sensor Data Aggregation and Fusion (eds K. Kalita, S.V. Kumar and M. Niranjanamurthy). <https://doi.org/10.1002/9781394275519.ch3>.
- 2 **Ramasamy, R.**, Anto Bennet, M., Vasim Babu, M., Jayachandran, T., Rajmohan, V., Janarthanan, S. (2023). A Novel Efficient AI-Based EEG Workload Assessment System Using ANN-DL Algorithm. Proceedings of the International Conference on Paradigms of Computing, Communication and Data Sciences. Algorithms for Intelligent Systems. Springer, Singapore. [https://doi.org/10.1007/978-981-19-8742-7\\_62](https://doi.org/10.1007/978-981-19-8742-7_62)
- 3 Vasim Babu, M., Madhusudhan Reddy, M., Vinoth Kumar, C.N.S., **Ramasamy, R.**, Aishwarya, B. (2023). Swarm Intelligence-Based Clustering and Routing Using AISFOA-NGWO for WSN. Third Congress on Intelligent Systems. CIS 2022. Lecture Notes in Networks and Systems, vol 608. Springer, Singapore. [https://doi.org/10.1007/978-981-19-9225-4\\_18](https://doi.org/10.1007/978-981-19-9225-4_18)
- 4 Vasim Babu, M., Vinoth Kumar, C.N.S., Baranidharan, B., Madhusudhan Reddy, M., **Ramasamy, R.** Energy-Efficient ACO-DA Routing Protocol Based on IoEABC-PSO Clustering in WSN **Lecture Notes on Data Engineering and Communications Technologies, 2022, 114, pp. 139–155.**, [https://doi.org/10.1007/978-981-16-9416-5\\_11](https://doi.org/10.1007/978-981-16-9416-5_11).

#### 5 Funded Projects

S.No.	Title of the project	Funding Agency	Duration	Amount	Status
-	-	-	-	-	-

#### 6 Ph.D. guidance

Sl.No	Scholar name	University	Topic	Status
-	-	-	-	-

#### 7 Short term Courses / Seminars /FDP/Workshop/Conference Attended:

S. No.	Date	Name of the Course	Organized by	Institution
1	2016	Analog and Digital Design Flow using Cadence Design Tool	Dept. of ECE	Thiagarajar College of Engineering
2	January 16-20, 2018	Deep Learning Techniques and Tools for Medical Applications	Dept. of CSE	Mepco Schlenk Engg. College
3	May 6-11, 2019	FDP on Machine Learning in Image Processing and Computer Vision Applications	E & ICT Academy	NIT Warangal
4	July 6-12, 2019	Matlab for Image Processing, Computer Vision & Deep Learning	Teaching Learning Centre, CIT	Coimbatore Institute of Technology (CIT)

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5	May 17-21, 2021	Advanced Trends in Biomedical Research using Deep Learning Techniques	Dept. of ECE	Mepco Schlenk Engg. College
6	June 28 – July 7, 2021	Parallel and Distributed Deep Learning	ATAL Academy	IIIT, Nagpur
7	July 5 – 9, 2021	FPGA Based Deep Learning Applications in Signal Processing	ATAL Academy	KLE Technological University
8	August 2-6, 2021	AI applications in Biomedical Engineering	ATAL Academy	NIT, Calicut
9	Sep 5 – 9, 2021	Machine Learning in Medical Image Processing	ATAL Academy	Katihar Engineering College.
10	03.07.2023 to 08.07.2023	Current Trends in Engineering, Science and Technology	-	Sree Sakthi Engineering College, Coimbatore
11	28.07-2025 to 05-08-2025	Recent Trends in Antenna Design for 5G & 6G	ICT Academy	MNIT Jaipur.
12	15 -12-2025 to 19 -12-2025.	VLSI Design and Methodologies	ICT Academy	Ramco Institute of Technology

#### 8. Short term Courses / Seminars /FDP/Workshop/Conference organized:

Sl.No	Title of the event	Organized by	Date	
			From	To
-	-	-	-	-

#### 9. Expert Lectures delivered:

S.no	Topic	Date	Organization

#### 10. Online Courses

Name of the Course	Organizing Institute/ Platform	Course duration	Status
Solving Ordinary Differential Equations with MATLAB	MATLAB	Self-paced	Certified
Introduction to Wireless and Cellular Communications	NPTEL/IIT Madras	12 weeks	Elite Certified
Introduction To Internet Of	NPTEL/ IIT Kharagpur	12 weeks	Elite with Silver

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Things			Certified
Introduction to Industry 4.0 and Industrial Internet of Things	NPTEL/ IIT Kharagpur	12 weeks	Elite Certified
Differential Equations Part I Basic Theory	Coursera/Korea Advanced Institute of Science and Technology	4 Weeks	Certified
Internet of Things: Communication Technologies	Coursera/University of California San Diego	4 Weeks	Certified
Fundamentals of Network Communication	Coursera/University of Colorado	4 Weeks	Certified
Introduction to the Internet of Things and Embedded Systems	Coursera/University of California	4 Weeks	Certified

### 11. Patents filed/awarded

Sl.No	Title	Inventors/ Applicants Name	Application Number	Status
1	A safety production device for pregnant women	1. Vasim Babu, M. 2. Ramasamy, R. 3. Janarthanan, S	202341034385 A	Filed

### 12. Membership in Professional societies: -

SCRS, IAENG, SDIWC,ISTE

### 13. Awards, Recognition & Achievements

- University Rank **Holder** in Master's program (**Anna University**)
- Got appreciation certificate to strengthen the employability of the student from Latha Mathavan engineering college
- Received a best paper award in 2nd Congress on Intelligence Systems (**CIS 2021**) in the category of Intelligent system held online during September 02-03, 2021 jointly Organized by CHIRST Deemed to be University, Bangalore.
- Received a best paper award in the AICTE sponsored International conference on Modern Research and Computations in Electrical Technology (**ICMRCET-2020**) Organized by Department of Electrical and Electronics Engineering, CMR College of Engineering and Technology, Hyderabad during 7 & 8 th of January 2021.

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**Any others (Board of studies/Governing Council/Staff Selection/ Reviewer/other duties)**

- Exam cell coordinator of ECE department
- Class in charge
- Hostel coordinator
- Internal FDP coordinator
- Visiting Professor Coordinator
- IE(I) Coordinator
- Assistant Placement Coordinator
- Industrial Visit Coordinator
- Internship Coordinator