

**Dr. S. Regina, M.E., Ph.D.,** Assistant Professor - II/ECE

Velammal College of Engineering and Technology, Madurai

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## **Educational Qualification:**

Name of the Degree	Name of the University	Year of Passing	Specialization	Marks Obtained (% or CGPA)
Ph.D	Anna University, Chennai	2022	Antenna Designs	9.75 (Course work CGPA)
M.E	Raja College of Engineering & Technology, Madurai	2011	Embedded System Technologies	8.44 (First Class)
B.E	Pandian Saraswathi Yadav Engineering College, Sivagangai	2005	Electronics & Communication Engineering	83 (First Class with Distinction)

**Experience in Years: 8 Yrs & 9 months** 

## **Employment History:**

S.No	Name of the College/Industry	Period	Years of Service
1.	Velammal College of Engineering and Technonlogy	2024 to till date	
2.	Pandian Saraswathi Yadav Engineering College	2022 to 2024	2 Years & 2.5 months
3.	Raja College of Engineering and Technology	2011 to 2015	4 years & 1.5 months
4.	Wipro Technologies	2005 to 2008	2 years & 5 months

**Interested Research Areas:** Metamaterial antenna, Textile antenna, Embedded System, Machine Learning .

# **Scholarships and Awards received:**

As a faculty, secured 3rd place and won cash award of Rs.10,000 in Cancer Hackathon in Startups Category held at Karpagam Academy of Higher Education, Coimbatore on 29.11.2023 organized by StartupTN, TICEL & TANSAM.
With my mentorship received Rs.1 lakh cash prize in Tamil Nadu Student Innovator (TNSI) contest 2022 from the Honourable Minister of MSME, Mr. T. M. Anbarasan at Anna University organized by EDIITN on 01.11.2023. for the project idea "Neurocare".
With my mentorship received cash prize of Rs.7,500 for the project title "Design of Smart Agriculture Monitoring System Based on IoT using LoRaWAN Technology" from Tamilnadu State Council for Science and Technology, Chennai on 03.03.2023.
With my mentorship won cash prize of Rs.30,000 in Healthcare Hackathon Contest at Vinayaka Mission School of Allied Health Sciences organized by StartupTN on 18.02.2023 for the Project Idea "WoW Care".
Received Certificate of Appreciation for mentoring students in TNSDG-Girls Championship organized by StartupTN on 17.02.2023 for the project Idea "Smart Preterm Monitor".
With my mentorship won cash prize of Rs.10,000 in Ideathon Contest at Excel Engineering College organized by StartupTN on 04.02.2023 for the Project Idea "WoW Life".
Participated in Mega contest of Innovation and Startups conducted in Syed Ammal Engineering College organized by StartupTN and appreciated by Mr.Sivarajah Ramanathan, Mission Director & CEO of StartupTN on 05.08.2022.
Received certificate of appreciation from SASI Institute of Technology and Engineering for acting as reviewer for their IEEE conference of SASI-ITE'24.
Received award from US Client for significant contribution in Mainframe project, when worked in WIPRO Technologies.
Received Feather-in-my-cap award from WIPRO Technologies, Chennai as a recognition of my sincere work in the Mainframe project, when worked in WIPRO.
Received Best Outgoing Student Award.
Received Young Student Scientist Certificate from Tamilnadu State Council for Science and Technology organized by Alagappa University, Karaikudi (1997).

## Patent rights received:

S.No.	Title of the Invention	Patent Application Number
1.	Wearable Device for Child Safety and Security System	202341039980 A
2.	Real Time Monitoring and Controlling Dam Water Level	202341030051 A
	Using IoT	
3.	Machine Learning Based Heart Disease Real Time Cardio	202341039999 A
	Vascular Detection System	
4.	Jacket for Early Breast Cancer Detection	401671-001
5.	Cloud Server Based Coal Mine Safety and Health	Filed (in Process)
	Monitoring System using LoRaWAN	

Resource Person(Invited Talk to Colleges):

S.No	Title of the Talk	Name of the Program	Venue	Date of Presentation
1.	Niral Thiruvizha Awareness	Seminar	Government Arts College for Women, Sivagangai	31.01.2024
2.	Pitch Challenge Toolkit Activity	Workshop	Idhaya College for Women, Sarugani	03.11.2023
3.	Prototype Process Design and development  Worksh		Alagappa Chettiar Government College of Engineering & Technology, Karaikudi	28.08.2023
4.	Machine Learning in Life Sciences	Workshop	Pandian Saraswathi Yadav Engineering College, Sivagangai	21.01.23

**NPTEL Course Completion Details:** 

S.No	Course Name	Status
1.	Enhancing Soft Skills and Personality	Successfully Passed
2.	Electronic Systems for Cancer Diagnosis	Passed with Elite
3.	Biomedical and Signal Processing	Successfully Passed
4.	Introduction to Internet of Things	Passed with Silver Elite

#### **Innovation Ambassador Certificates Received from IIC:**

- 1. Foundation Level Certificate
- 2. Advanced Level Certificate
- **3.** Upskilling Certificate

#### **Publication Details:**

No of International Journals: 11

No of National/International Conferences: 03

No of Book Chapter: 01

- 1. R. Raja, S. Regina, N. Ezhilmathi and C. Murugan, "Dental Caries Detection using NIR Images with Encoder Modified U-Net and Feature Pyramid Network", YMER, vol.22 (12), pp. 1914-1923, 2023.
- 2. R. Raja, S. Regina, N. Ezhilmathi and C. Murugan, "An IoT Based System for Monitoring Crop Fertilization", Journal of Xi'an University of Architecture and Technology, vol.15 (12), pp. 522-529, 2023.
- **3.** K. R. Premlatha, R. Raja and **S. Regina**, "Topic Profile Based Learning Material Retrieval using LDA", High Technology Letters, vol.29 (12), pp. 170-179, 2023.
- **4.** R. Raja, **S. Regina** and K. R. Premlatha, "Developing Embedded Vehicle Accident Alert System: Block Box Design", Journal of Xidian University, vol.17 (12), pp. 341-349, 2023.
- **5.** R. Raja and **S. Regina**, "Monitoring Street Light Using IoT Technology to Detect Fault Automatically", GIS Science Journal, vol.10 (10), pp. 571-581, 2023.
- **6. S. Regina** and A. Merline, "Flexible leather substrate dual-band wearable antenna with impact analysis on testing under wet condition for human rescue system", Textile Research Journal, vol. 91 (17-18), pp. 1927-1942, 2021.
- **7. S. Regina** and A. Merline, "Numerical Simulation of the D-Shaped Ring Resonator Antenna", International Journal of Advance Research in Science and Engineering, vol. 10(7), pp. 420-430, 2021.
- **8. S. Regina** and A. Merline, "Impact analysis of metamaterial superstrate stack loaded on the top of the microstrip patch antenna structure for GSM application", Solid State Technology, vol. 63 (5), pp. 7425-7438, 2020.
- **9. S. Regina** and A. Merline, "A High Performance Rectangular Patch Antenna with H-Shaped Periodic Array Metamaterial", Taga Journal, vol.14, pp.2162-2169, 2018.
- **10. S. Regina** and A. Merline, "Microstrip Patch Antenna Functioning with Various Shapes of Metamaterial A Survey", Asian Journal of Applied Science and Technology, vol. 2(3), pp. 1-7, 2018.

11. S. Umanayaki, M. Sabari Devi and S. Regina, "Finding an Emulation Attack in Cognitive Radio", International Journal of Advanced Technology in Engineering and Science (IJATES), vol. 3 (2), pp. 331-336, 2015.

#### **Conferences:**

- **1. S. Regina** and A. Merline, "Numerical Simulation of the D-Shaped Ring Resonator Antenna", in Proceedings of the International Conference on Research in Engineering and Technology (RET-2021), pp. 789-799, 2021.
- 2. V. Kavitha and S. Regina, "Design and Performance Analysis of Fault Secure Network on Chip using FPGA, in Proceedings of the National Conference on Networking and Information Computing, 2013.
- **3. S. Regina**, "An Ultra-Low Power Pulse Oximeter Implemented with Stress Analyzer", in Proceedings of the National Conference on Advanced Technologies in Electrical Engineering, 2011.

## **Book Chapter Published:**

1. Prasad Jones Christydass S, Saravanakumar R, Regina S and Malaisamy K, "Split Ring Resonator Inspired Polygonal Shaped Printed Antenna for Wireless Application", in book Digital Convergence in Antenna Designs for Real Time Applications, Scrivener-Wiley, Dec 2023.

## **Workshop and Seminars Attended:**

- 1. Attended two-days National workshop on "AI for Image Processing, Computer Vision and Robotics" from 01.03.2024 to 02.03.2024 at Thiagarajar College of Engineering and Technology, Madurai.
- 2. Attended one-day National workshop on "5G & Beyond Technologies using Keysight Equipments" on 19.01.2024 at Thiagarajar College of Engineering and Technology, Madurai.
- **3.** Attended NPTEL-AICTE FDP on "Electronic Systems for Cancer Diagnosis" from July to October 2023.
- **4.** Attended NPTEL-AICTE FDP on "Biomedical Signal Processing" from April to June 2023.
- **5.** Attended a webinar on one week online short term course on 'Emerging Trends in Antenna Design for RF-Energy Harvesting Circuit' organized by National Institute of Technology (NIT), Delhi from 03.01.2022 to 08.01.2022.
- **6.** Attended a webinar on '3D EM Simulation Involving CST Software' organized by C.S. Patel Institute of Technology, Charusat and Jyoti Electronics, Ahmedabad from 02.06.2020 to 03.06.2020.
- 7. Attended a webinar on 'Measurement using Spectrum Analyzer and VNA' organized by K.L.N. College of Engineering on 31.05.2020.
- **8.** Attended a webinar on 'Recent Trendy Antenna Design and Analysis using EM Solve' organized by IEI and Wilma Communications, Tirunelveli from 26.05.2020 to 30.05.2020.

- **9.** Attended a webinar on 'Design and EM Simulation of RF Modules, Antennas using CST Studio Suite' organized by Thiagarajar College of Engineering, Madurai and Jyoti Electronics, Ahmedabad from 26.05.2020 to 27.05.2020.
- **10.** Attended a webinar on 'An Effective Research Paper Writing Skills' organized by Bhagwan Mahavir University, Gujarat from 13.04.2020 to 16.04.2020.
- 11. Attended a National workshop on 'Intellectual Property Rights' organized by Sethu Institute of Technology, Kariapatti from 08.11.2018 to 09.11.2018.
- **12.** Attended a ICMR sponsored two days seminar on "Implantable Devices and Hand Held Systems Utilizing RF and Microwave for Medical Application" organized by K. Ramakrishnan College of Technology, Trichy from 28.11.2017 to 29.11.2017.
- **13.** Attended a IEEE-Madras section sponsored two days seminar on "Recent trends in RF, Antennas and MIC" organized by KLN college of Engineering from 1.12.2016 to 2.12.2016.
- **14.** Attended a one day workshop on "Microwave devices and Measurements" organized by GK antennas, Madurai on 11.09.2016.
- **15.** Attended a two days seminar on "Research Issues in Next Generation Satellite Communication" organized by Sethu Institute of Technology, Kariapatti from 17.03.2016 to 18.03.2016.
- **16.** Attended a one day seminar on "Antennas and Wave Propagation" organized by K. Ramakrishnan College of Technology, Trichy on 11.03.2016.

### **Udemy Certification:**

☐ Certificate of completion on the course "Google Cloud Platform (GCP) Fundamentals for Beginners".

#### **Membership:**

☐ Life time member in IEI

## **Google Scholar Report:**

