



SUGUMAR D

Educator | Researcher | Author | Speaker | Entrepreneur | Innovation Ambassador-AICTE

Associate Professor, Department of Electronics and Communication Engineering

Karunya Institute of Technology and Sciences

Coimbatore 641114, Tamil Nadu, India

Mobile : +91- 9629451775

Email : sugumar@karunya.edu / sugumar.ssd@gmail.com / sugumar@ieee.org

Roles & Responsibilities

ExeCom Member IEEE SPS Madras Chapter for 2022-2023, **IEEE SBC Advisor** SPS, VTS & APS @ KITS

Co-Ordinator (University) of Innovation-IIC5.0, IIC6.0 & IIC7.0, **Co-ordinator** (ECE) for Consultancy till 2024,

In-Charge for Signal Processing Lab (Feb 2012 (Established) to Aug 2024),

Consultant for Antenna Design and AI-ML based Signal Processing Application,

Founding Director of Bootstrap Startup Companies (WinRadoMind Innovations Pvt. Ltd. and FIOPSE Security)

RESEARCH/TEACHING INTERESTS

Research interest includes **Blind Source Separation** (PCA, ICA & IVA), **AI-ML based Signal Processing** (Audio, Image, Video, Bio-Medical Signals (ECG, EEG) & Bio-Medical Image applications) and, **Wearables, Flexible & Metamaterial based Antennas** for RF and Wireless Communication (GSM, GPS, IoT, 4G, 5G, NFC, RFID, Wi-Fi & SDR based FM) and medical applications. Teaching interest includes Digital Signal Processing, Digital Image Processing, Digital Communication, Wireless & Mobile Communication, Spread Spectrum Systems, MATLAB for Engineers, Python, AI, ML, DL, Multimedia and Compression Techniques, Statistical Digital Signal Processing, Speech and Audio Signal Processing, Microwave Integrated Circuits, Global Positioning Systems, Advanced Radiation Systems, Smart Antennas.

EXPERIENCE

- Associate Professor, ECE, Karunya Institute of Technology and Sciences, Coimbatore, India, 2021 – present
- Assistant Professor (AGP8000), ECE, Karunya Institute of Technology and Sciences, India, 2014– 2021
- Assistant Professor (AGP7000), ECE, Karunya Institute of Technology and Sciences, India, 2013– 2014
- Assistant Professor (AGP6000), ECE, Karunya Institute of Technology and Sciences, India, 2009 – 2013
- Lecturer, ECE, Karunya Institute of Technology and Sciences, Coimbatore, India, 2007– 2008 & 2002 – 2005

EDUCATION

Degree	Branch / Specialization	University	Class	Mode	Month & Year of Passing
Ph.D.	Information and Communication Engineering	Anna University	Highly Commended	Part Time	December 2019
M.E.	Communication Systems	Anna University	Distinction	Full Time	March 2007
B.E.	Electronics and Communication	Bharathiar University	First Class	Full Time	April 2002

- PG Program**, ARTIFICIAL INTELLIGENCE & MACHINE LEARNING with 96.86%, from The UT at Austin June 2020 to July 2021.
- AICTE-NITTT course** (Completed 8 modules) with 84%, on Feb 2021.
- Master of Data Science** (Global) from Deakin University, Australia from **October 2023 to April 2025**

SUMMARY OF INTERNATIONAL JOURNAL & CONFERENCE PUBLICATIONS - [PUBLISHED & ACCEPTED]

Year	International Journal Publications	International Conference Publications	National Conference publications	Book/Chapter
2009 - 2025	42	49	5	10

PATENTS

1	Sugumar D et al. (2025). A System for Proactive Diagnosis of Breast Cancer Employing Non - Invasive Adhesive Sensor Array Antenna. 202241038587 A,
---	--

RESEARCH GUIDANCE

Research guidance as supervisor	Completed	Ongoing
Doctor of Philosophy - PhD Thesis advising	-	6
Master of Engineering - Master's Thesis advising	32+	-

PROFESSIONAL MEMBERSHIPS

1	Senior Member of IEEE (SPS & APS) , Life member of ISTE & Associate Member of AMIE
2	Member of IAENG, IACSIT, ICSES, SDIWC, IDES, DSC, WSS & InSc

AWARDS/HONORS,

- Young Achiever Award, Innovative Professional Award, Best Teacher Award
- International Innovative dedicated Teaching Faculty & Professional Engineer Award.