

Faculty Profile



Dr. R. Hema , M.Tech, Ph.D
Associate Professor - SCOFT-ECE

HIGHLIGHTS:

- Number of Journal Publications: 25
- H-Index: 03
- Sponsored Event Funding Received: 01
- Patents Published: 07

PROFESSIONAL LINKS:

- Scopus ID: [57192100606](https://www.scopus.com/authid/detail.uri?authorId=57192100606)
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57192100606>
- Google Scholar ID: Dr R Hema
- Web of Science ResearcherID is [AAI-9768-2021](https://orcid.org/0000-0001-9768-2021)
- Anna University Faculty ID: 270687
- AICTE Faculty ID: 1-510141698
- LinkedIn: <https://www.linkedin.com/in/dr-hema-r-3888621a9>

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 20 Years
- Industrial Experience: Nil

INTERNATIONAL EXPOSURE: Nil

AREA OF SPECIALIZATION:

- Embedded system and PCB Design
- Underwater Wireless Communication
- Free Space Optics(FSO)
- Digital Image Processing

Ph.Ds AWARDED WITH DETAILS:

S:No	Name of Scholar	Title of Thesis	Year of Completion	Full Time/Part Time

Ph.Ds GUIDING:

- **Full Time Scholars: Nil**
- **Part Time Scholars : 02**

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

- Received Fund from ISRO for sponsored National Seminar on “Energy Harvesting Antenna for Satellite Applications” during December 2018 in the department of ECE, Easwari Engineering College.

PATENTS PUBLISHED/GRANTED:

- Patent Published dated 02.08.2024 for “Scalable Deep Learning Solutions For Comprehensive Patient Health Monitoring” , Application No. 202441055760 A
- Patent Published dated 05.05.2023 for “ Hand Gestures for Help Detection and Rescue using Deep Learning” , Application No.202341027259 A
- Patent Published dated 17.06.2022 for “ Development of Device for Recognizing Speech from an Audio Signal”, Application No.202241027259 A
- Patent Published dated 25.06.2021 for “A Badge Shaped Microstrip Wearable Antenna for X-Band Application “Application No. 202141024860 A

COURSES CERTIFIED:

- Successfully completed the AICTE Quality Improvement Programme (QIP) – PG Programme in Machine Learning and Cyber Physical Systems at the Indian Institute of Information Technology (IIIT), Tiruchirappalli, Tamil Nadu (June–December 2025).
- Certified Course on NBA Accreditation and Teaching and Learning in Engineering from NPTEL

ACHIEVEMENTS AND AWARDS:

- **SIH 2025 Faculty Mentor Award** - Recognized for mentoring the student team that won the Grand Finale of the Smart India Hackathon 2025 (Hardware Edition).
- **Awarded First Prize** for the project titled “Voice Recognition Enabled Farmer Assistance Module with Lora WAN Connectivity” during Project Day 2022, conducted by Easwari Engineering College in April 2022.
- **Awarded as IET Mentor Award** for IET Chennai Local Network-Smart City Challenge 2017 on August 2017

SPECIAL SESSIONS DELIVERED:

- Invited Talk given on “Recent Trends and Challenges in Free Space Optical Communication” at Sri Sairam Institute of Technology on 21.11.2023

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- Attended “IEEE Sponsored International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems for presenting paper titled” IOT Driven Precision Farming: Enhancing Crop Yield Sustainability Through Real Time Data Analytics, December 2024
- Attended Short Term Course on “**AI/ML and Data Science for Industry 4.0** at **NITTTR, Chandigarh** from 29.01.2024 to 2.02.2024.
- Participated in the AICTE Recognized Faculty Development Programme on “**STEM Teaching**” from 18.12.2023 to 22.12.2023 (One Week) at **NITTTR, Chandigarh**.
- Attended AICTE QIP sponsored Short Term Course on “**Fiber Optics and Optoelectronics Technology**” organized by the Department of Electronics and Communication Engineering at IIITDM Kancheepuram, from 03.02.2022 to 08.02.2022.
- Attended Five day online FDP on “Inculcating Universal Human Values in Technical Education” organized by All India Council for Technical Education(AICTE) from 25.10.2021 to 29.10.2021
- Attended Five Day AICTE Recognized **FDP** on “**Technological Interventions using Wireless Communication.**”, Organized by National Institute Technical Teachers Training and Research, May 2020

PROFESSIONAL MEMBERSHIPS:

- ISTE Lifetime Member

OTHER DETAILS (If any):

- Reviewer for various International Journals And Conferences
 1. IEEE Access Journal
 2. Physica Scripta Journal
 3. Physical Communication Journal
 4. International Conferences
- Organized Workshop on “Image and Video Processing using TMS320C6748 Processor” on 10.08.2023 for III Year ECE students
- Organized Short Term Course on” IOT and its Applications” in association with NITTTR-Chandigarh from 05.12.2022 to 09.12.2022.
- Organized Short Term Course on” MATLAB – Artificial Intelligence and Optimization Techniques” in association with NITTTR-Chandigarh from 21.09.2022 to 25.09.2022
- Organized Short Term Course on” Energy Harvesting & Storage Materials & Devices” in association with NITTTR-Chandigarh from 12.09.2022 to 16.09.2022