Prof. M.G.Sumithra, Principal

Scopus | Google Scholar | Research Gate | LinkedIn | ORCiD | Publons | Vidwan

**Contact Number:** 9865816671

Dr. Sumithra M G has completed 29 years of Academic and Administration Experience. She has completed her UG in the Electronics and Communication Engineering domain and PG in Medical Electronics domain. She secured First class with distinction (Rank -II) during her Post graduate. Her areas of interests include Information and Communication Engineering Speech Signal Processing and completed her Ph.D in the year 2011. She has published 100+ articles in various reputed national and international journals and patented 10 of her ideas. She has published two books and one patent has been

**Strength:** 

granted.

Academic administration, Curriculum development, Inclusive Leadership, Team player, Strong Industry, Academic Peers and Research scientists' network, readiness to take up challenging responsibilities and PRO activities

**Awards and Recognitions:** 

- 1. Best paper award at BIT-S, paper titled, "Enhancement of Speech signals using scale adaptive wavelet Transform" National conference, NCSSS-2010
- 2. Faculty mentor for TEXAS INSTRUMENTS INNOVATION CHALLENGE INDIA **ANALOG DESIGN CONTEST 2013**
- 3. Identified resource person by NBA for Outcome Based Accreditation (2013 format)
- 4. Faculty mentor for TEXAS INSTRUMENTS INNOVATION CHALLENGE INDIA ANALOG CIRCUIT MAKER DESIGN CONTEST 2014 & 2015
- 5. Received the certificate of Appreciation for being Faculty mentor for Drish TI TEXAS INSTRUMENTS online contest 2017.
- 6. Recipient of **Best Professor Award of the year 2017** from ASDF Global Awards
- 7. **NVIDIA Deep Learning Institute Certified Instructor** for Fundamentals of Deep Learning and Health care Image Analysis
- 8. Recipient of In Res -Academic Excellence Award 2021in recognition of outstanding Professional andResearch Achievements in the field of Engineering from Institute of Researchers
- 9. Evaluator TOYCATHON 2020
- 10. Veteran Evaluator of Smart India Hackathon 2022
- 11. Recipient of IETE Best Teacher Award 22
- 12. Recipient of **Thangapenne Achiever Award 22** from DR Jewellery, Coimbatore

### **Research Thrust Areas:**

- Digital Signal /Image Processing
- Speech Communication
- Bio- Medical Engineering
- Wireless Communication Systems
- AI & Deep Learning

# Membership of Scientific and professional Societies:

- **1.** Senior Member **IEEE**(**92641607**)
- 2. Life Member of ISTE(LM3360)
- 3. Life Member of IAENG
- 4. Senior Member of IACSIT(8034540)
- 5. Fellow in India Bio-design
- 6. IETE Fellow Membership NoF500496.
- 7. IEEE Membership (electronic) Membershipno.92641607
- **8.** Association of Scientists, Developers and Faculties MASDF-7761298242789113
- **9.** Life Member in Society for smarter-mobility
- 10. Member IET 1100669798

#### 11. Member in

- IEEE Nanotechnology Council
- IEEE Biometrics Council
- IEEE Council on Electronic Design Automation
- IEEE Sensors Council
- IEEE Council on Superconductivity
- IEEE Systems Council
- Technology and Engineering Management Technical Community, IEEE
- IEEE Council on RFID
- Brain Community, IEEE
- Pattern Analysis and Machine Intelligence, IEEE Computer Society Technical Committee
- Multimedia Computing, IEEE Computer Society Technical Committee
- Cloud Computing Community, IEEE Computer Society Technical Community
- Digital Senses Community, IEEE
- Education, IEEE Computer Society Technical Community
- Green ICT Community, IEEE

## Journal Reviewer:

- 1. Signal & Image Processing: An International Journal (SIPIJ)ISSN: 0976 710X (Online); 2229 3922 (print)
- 2. International journal of VLSI design and Communication Systems ISSN: 0976 1357 (Online); 0976 1527 (print)
- 3. International Journal of Research in Engineering & Advanced Technology"(IJREAT)
- **4.** International Journal of Computer Theory and Engineering (**ISSN:** 1793-8201 **DOI:** 10.7763/IJCTE)
- 5. International Journal of Information and Communication Technology (IJICT). (Inder science)
- 6. Journal of Engineering Science & Technology (JESTEC) School of Engineering, Taylor's University, Malaysia
- 7. Springer Journal of Signal, Image and Video Processing
- 8. IEEE Communication Letters
- 9. Circuits, Systems & Signal Processing (CSSP)
- 10. Sensors-MDPI
- 11. Health care -MDPI

## **Editorial Member:**

- 1. Journal of Communication Engineering and Systems. (ISSN: 2249 –8613)
- 2.International journal of Intelligent networks ISSN: 2666-6030
- 3. International Journal of Intelligence and Sustainable Computing(IJISC)

**Associate Editorial Member:** South Asian Journal of Research in Engineering Science and Technology. ISSN: 2455 – 9261)

#### **Funds Received:**

- 1. Seminar grant of Rs.30000/- received from CSIR for two national seminar on Computational Intelligence for Health care during April2014
- 2. Seminar grant of Rs.30000/-received from ASRB for two day national seminar on Applications of Nuclear materials during March 2020
- 3. ATAL FDP on Design Thinking a grant of Rs.93,000/- received from AICTE for 5 days during August 2020.
- 4. AICTE-ISTE Induction/ Refresher Program on CognitiveSkills for Active Learner" a grant of Rs.93,000/- received during September 2021
- 5. Received an amount of Rs.10000/- from CSIR for organizing one day National level seminar on "Nano-materials for Bio-Implants", Jan. 2022
- 6. Received an amount of Rs.25000/- from CSIR for organizing one day National level seminar on "Skill Upgradation of Biomedical Engineers in Medical Equipment Handling

- & Description & Samp; Ventilators as of COVID'19" Jan. 2022
- 7. Received an amount of Rs. 25000/- from CSIR for organizing Two Day National Level Conference on "Point-of-Care Technology: The Next Frontier in Personalized Medicine and Health Care (POCT'22)". Feb. 2022
- 8. Received an amount of Rs.50000/- from INSA for organizing Two Day National Level Conference on "Technological Innovations of Artificial Intelligence in Health Care". March 2022.

## **Books Published: I{Dec 22)**

- 1. Brain Computer Interface: Using Deep Learning, Wiley Publications
- 2. Deep Learning for Cognitive Computing Systems- Tecnological Advancements and Applications , Degruyter

#### **Patents Published:**

- 1. Poultry Chicken Gender Classification Using Deep Learning Models (202141009555).
  - a. Artificial Intelligence based battery management system for electric Vehicles to Forecast State of Charge (202141001148).
- 2. Foot Ulcer Detection Using Deep Learning Models (202041053689).
- 3. Automatic Height Adjustment and overload Detection in Ceiling Fan for Anti-Suicides (202041055129).
- 4. Organic LED Farming Using Artificial Intelligence for Self Sustainability during Post Covid-19. (202041052625).
- 5. Automatic E-Sanitizer Spray for Vehicles (202041032057).
- 6. Education through Hexacopter with Detachable Display Module for Rural Area Students (202041046582).
- 7. Smart e-Dust Bin for Hotel Food Waste (202041050324).
- 8. Leg-navigated vehicle for physically challenged people (201941038835).
- 9. Oral Squamous Cell Carcinoma Detection from Histopathological Images using Deep Learning (202141035243)
- 10. Design patent titled Umanned Drone for Geographic mapping of inaccessible terrain and locations(369404-001)

#### **Granted Patent (South African ):**

**1.** A Novel System for Wind powered IoT Based Sustainable Organic Compost machine -patent number 2022/07879, date of grant 28.0922 date of Expiry 15.07.2042.