

Cellphone : 9791650147/ 7904959202

e-Mail ID : saminatj@srmist.edu.in / saminathan23@yahoo.in

Address : Department of Biomedical Engineering
SRM Institute of Science & Technology
Ramapuram, Chennai – 600 089.



Present Position

Assistant Professor, Department of Biomedical Engineering, SRM Institute of Science and Technology, Ramapuram, Chennai from June 2023.

Work Experience

- Assistant Professor, Department of Biomedical Engineering, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science & Technology, Avadi, Chennai from December 2022 to June 2023.
- Teaching Fellow, Department of Electronics and Communication Engineering, College of Engineering Guindy, Anna University, Chennai from August 2014 to November 2022.
- Lecturer, Dr.Dharmambal Government Polytechnic College for Women, Tharamani, Chennai from June 2014 to August 2014.

Educational Qualifications

- ❖ Ph.D. (July 2015 - Jan 2022) in Medical Image Processing from Faculty of Information and Communication Engineering, College of Engineering, Guindy, Anna University, Chennai.
Title: Efficient Machine Learning Frameworks for Detection of Diabetic Foot in Infrared Thermograms
- ❖ M.E. (2012 - 2014) in Medical Electronics, College of Engineering, Guindy, Anna University, Chennai.
- ❖ B.E. (2008 - 2012) in Electronics and Communication Engineering, Sree Sastha Institute of Engineering and Technology, Chennai.

Research Areas of Specializations

- Biosignal & Medical Image Processing, Pattern Recognition, Machine Learning, Biomechanics

Membership in Professional Organizations

- IEEE Member
- Member of IEEE Biometrics Council
- Member of IEEE Computer Society
- Member of IEEE Engineering in Medicine and Biology Society (EMBS) Technical Committee on Biomedical Imaging and Image Processing
- Reviewer of Computers in Biology and Medicine
- Reviewer of The Journal of Super Computing
- Reviewer of IEEE Sensors

Research Guidance

Number of M.E./ M.Tech. Projects Guided : 10

Papers Published in Journals

1. **J.Saminathan**, M.Sasikala, VB.Narayanamurthy, K.Rajesh and R.Arvind, "Computer aided detection of diabetic foot ulcer using asymmetry analysis of texture and temperature features", *Infrared Physics & Technology*, published by Elsevier. Vol. 105, Issue 2, pp. 1-7 (2020). **(Impact Factor: 2.33)**

Book Chapters Published

1. **J.Saminathan**, Nandu Bhavani M and M.Sasikala, "Detection of Diabetic Foot Using Statistical Features", in Open Access Book "Diabetic Foot - Recent Advances" (ISBN 978-1-83880-815-0), published by IntechOpen, <https://www.intechopen.com/online-first/83038> (August 2022).

Papers Published in Conferences

1. **Saminathan.J**, Jayasree.T, "Computer Aided Diagnosis of Pulmonary Nodules from CT Images" presented in a National level conference on Information and Communication Engineering, organised by RMK Engineering College, Chennai, India from 24-Feb-2014 to 24-Feb-2014.

Sponsored Projects Completed

1. "Smart Wheelchair", funded by CTD, Anna University, Chennai-25 (July-2018- January-2019). Project Cost: Rs.25000/-.

Responsibilities Held

1. Department Exam Cell in-charge, June 2023 – till date.
2. Department ERP Coordinator, June 2023 – till date.

Subjects Handled for UG/PG Programmes

1. Electron devices and circuits
2. Medical Imaging System and Radiotherapy
3. Principles of Digital Image Processing
4. Radiological Equipments
5. Control System for Biomedical Engineering
6. Diagnostic and Therapeutic Equipment
7. Electronics in Medicine
8. Rehabilitation Engineering
9. Biometric Systems
10. Medical Electronics
11. Advanced Neural Computing
12. Pattern Recognition Techniques and Applications
13. Health Care, Hospital and Equipment Management

14. Advances in Electronics Applied to Hospital Engineering
15. Bio Medical Instrumentation Laboratory
16. Diagnostic and Therapeutic Equipment Laboratory
17. Sensors and Measurements Laboratory
18. Biosignal Processing Laboratory
19. Data Acquisition and Processing Laboratory
20. Digital Signal Processing Laboratory

Invited Lectures

1. Delivered a Lecture on "Tutorial on FIR and IIR Filter" in FDTP on Principle of Digital Signal Processing organized by Department of ECE, College of Engineering, Guindy, Anna University, Chennai (10-Dec-2014).
2. Delivered a Lecture on "Recent Trends in Biomedical Image Processing" in Two Days Seminar organized by Department of E&I Engineering, KCG College of Technology, Chennai. (29-Nov-2017).
3. Delivered a Lecture on "Patient Safety" in One Day Seminar organized by Department of BME, Rajalakshmi Engineering College, Thandalam, Kancheepuram (06-Mar-2019).
4. Delivered a Lecture on "Amplifiers and Oscillators" in Guest Lecture organized by Dr.Dharmambal Govt. Polytechnic College for Women, Taramani, Chennai (05-Mar-2020)

Workshops / Seminars / Conferences

1. National level short Course on Recent Advances in Biomedical Signal & Image processing organized by Department of Biotechnology and Medical Engineering, National Institute of Technology Rourkela from 30-May-22 to 03-Jun-22.
2. International level seminar on Siemens Healthineers Engg Webinar Session 1: Basics of Ultrasonography and Transducer Types organized by Siemens Healthineers on 12-Mar-21.
3. National level short Course on Two Days Technical Seminar on Augmenting Machine Vision with Deep Learning organized by Mepco Schlenk Engineering College, Sivakasi, Tamil Nadu from 05-Mar-21 to 06-Mar-21.
4. National level short Course on ATAL Online FDP on Wearable Devices organized by Centre for Medical Electronics, Anna University, Chennai from 15-Feb-21 to 19-Feb-21.
5. International level short Course on Technologies with Social Relevance organized by Department of ECE, GMR Institute of Technology, Rajam, Andhra Pradesh from 27-Jul-20 to 01-Aug-20.
6. International level seminar on Opportunities and Challenges for Artificial Intelligence organized by IEEE -PSES Madras Chapter on 04-Aug-20.
7. International level short Course on Matlab Master Class 2020 organized by IETE Mumbai and Pantech Prolabs India Pvt Ltd. from 01-Sep-20 to 30-Sep-20.
8. International level short Course on 30 Days Webinar Series on AI Master Class organized by Andhra Pradesh State Skill Development Corporation (APSSDC) and Pantech Prolabs India Pvt, Ltd. from 05-Oct-20 to 03-Nov-20.
9. National level short Course on Three days online Faculty Development Program on "Academic Transformation with Secrets of Empowerment" organized by Manjara Charitable Trust & Rajiv Gandhi Institute of Technology, Mumbai from 23-Jul-20 to 25-Jul-20.
10. National level short Course on Recent Trends in Biomedical Engineering - Research Perspective organized by Department of Biomedical Engineering, Dr.NGP Institute of Technology, Coimbatore from 26-Apr-20 to 30-Apr-20.

11. National level short Course on Recent Advances in Biomedical Applications and communication Networks -2020 organized by Department of ECE, GMR Institute of Technology, Rajam, Andhra Pradesh from 13-Jul-20 to 18-Jul-20.
12. National level short Course on Recent Advancements in Semiconductor Technologies (RASET 20) organized by Department of Electronics and Communication Engineering, SRM IST, Chennai. from 09-Oct-20 to 14-Oct-20.
13. National level short Course on Potential and Challenges for Integrating 5G Networks and IOT Applications in Smart City Environment organized by Department of Information Technology, Hindustan College of Engineering and Technology from 16-Nov-20 to 21-Nov-20.
14. National level short Course on Moodle Learning Management System organized by Centre for Faculty Development, Anna University, Chennai from 24-Aug-20 to 28-Aug-20.
15. National level seminar on Medical Signal Analysis organized by Department of ECE, PSNA College of Engineering & Technology, Dindigul on 29-Jul-20.
16. National level seminar on Demystifying Data Science AI and ML organized by Department of Biomedical Engineering, Dr.NGP Institute of Technology, Coimbatore on 23-Jul-20.
17. National level workshop on Network and Hardware Security Challenges organized by Dept. of ECE, CEG, Anna University from 11-Mar-19 to 12-Mar-19.
18. National level workshop on Hands on Training of Intellisuite: A Complete Solution for MEMS organized by Dept. of ECE, CEG, Anna University on 27-Feb-19.
19. International level seminar on Fourth WHO Global Forum on Medical Devices organized by AMTZ, Kalam Convention Centre, Visakhapatnam from 13-Dec-18 to 15-Dec-18.
20. National level short Course on FDTP on EC6504 Microprocessor and Microcontroller organized by Department of ECE, College of Engineering, Guindy, Anna University, Chennai - 25 from 30-May 18 to 05-Jun-18.
21. International level short Course on GIAN Course on Medical Imaging Techniques organized by Dept. of Medical Physics, CEG, Anna University, Chennai from 30-Oct-17 to 10-Nov-17.
22. National level short Course on OPHTHALMIC EQUIPMENT PLANNING AND INSTRUMENTATION organized by THE SANKARA NETHRALAYA ACADEMY, VANAGARAM, CHENNAI from 17-Nov-16 to 18-Nov-16.
23. National level seminar on Engineering Education & Research Seminar organized by National Instrumentation on 22-Mar-16.
24. National level workshop on WBAN-Sensing and Signal Processing Challenges organized by DECE, CEGC, Chennai-25 from 23-Mar-15 to 24-Mar-15.
25. National level workshop on Internet of Things - Technology of Tomorrow organized by DECE, CEGC, Chennai-25 from 26-Nov-15 to 27-Nov-15.
26. National level workshop on Advancements in Biomedical Signal and Image Processing organized by Dept of Electronics Engg., MITC, Ch-44 from 29-Oct-15 to 30-Oct-15.
27. National level workshop on Author Workshop on Book/Journal Publishing organized by University Library, Anna university on 24-Sep-14.