



Dr.REMYA RAJ

Assistant Professor
Department of Biomedical Engineering
SRMIST, Ramapuram

Remyar1@srmist.edu.in

Experience in Teaching: 4 years

Experience in Research: 5 years

Research Interest: Bio-Signal Processing, Biomedical Instrumentation, Machine Learning, Pattern Recognition

EDUCATION

Degree	Institution	Specialization	Year of Passing
Ph.D	SRM Institute of Science and Technology ,Tamil Nadu, India (Visvesvaraya PhD Scheme under Ministry of Electronics and Information Technology, Govt. of India)	Bio-Signal Processing	2021
M.Tech	Karunya University, Coimbatore, India	Biomedical Instrumentation	2013
B.Tech	Anna University	Biomedical Engineering	2011

PUBLICATION

- RemyaRaj,J.Selvakumar,“ Curve Approximation Models based on Statistical Distribution with Application to Photoplethysmography (PPG) Signal”, IOP Conference Series: Material Science and Engineering,2021, (**Scopus, SNIP:0.53**)
- RemyaRaj, J.Selvakumar, “Reflected wave parameter estimation and Augmentation Index calculation from Photoplethysmography model for different age groups”, Biomedical Engineering : Applications, Basis and Communication,2021, (**Scopus, SNIP:0.38**)
- Remya Raj, J.Selvakumar, Vivek Maik, “Smart Automated Heart Health Monitoring (SAHM) Using Photoplethysmography, Signal Classification”.biomedicalengineering/ biomedizinische technik, De Gruyter Publications, <https://doi.org/10.1515/bmt-2020-01132020>,2020. (**SCIE Impact factor: 1.7**)
- Remya Raj, J.Selvakumar, Vivek Maik, “AFODSS: Heart Rate Estimation Method From Photoplethysmographic Signals with Motion Artifacts Using Fourier-Sparse Dual Optimization”, IEEE Sensors Journal,vol.19.nos.21, IEEE Publications,2019 (**SCI Impactfactor:4.3**)
- Remya Raj, Smily Jeyajothi, “Estimation of Heart Rate from Photoplethysmography signal using SVR method.” vo.2. nos.2 International Journal of Science and Technology (IJST), 2014.

CONFERENCES/WORKSHOPS/SEMINARS

- Remya Raj, J.Selvakumar, Vivek Maik , Curve Approximation Models based on Statistical Distribution with Application to Photoplethysmography (PPG) Signal , Second International Conference on Instrumentation, MEMS and Bio-sensing Technology (Virtual) - ICIMBT2021, SRM Institute of Science and Technology, Chennai, Tamilnadu, India, February 18-20, 2021.
- Remya Raj, J.Selvakumar, Vivek Maik, An Efficient Method for Photoplethysmography Signal Compression using Modified Adaptive Fourier Decomposition”,2018 **IEEE-EMBS Conference on Biomedical Engineering and Sciences (IECBES) Sarawak,Malaysia, pp.87- 90, 2018.**
- Remya Raj, J.Selvakumar, M.Anburajan, “ Evaluation of Hypotension using Wavelet and Time Frequency Analysis of Photoplethysmography (PPG) Signal”, Proceedings of International Conference on Advances in Computational Intelligence and Communication (CIC 2016), Pondicherry Engineering College, IJCSIS Volume 14 Special Issue October 2016.
- Remya Raj, Smily Jeyajothi, Real Time Estimation of Respiratory Rate from Photoplethysmography Signal using Principal Component Analysis (PCA), International conference on Information Technology, Electronics and Communication held at Bangalore, India during March 30th and 31st 2013.

- Remya Raj, Smily Jeyajothi, Estimation of heart rate from photoplethysmographic signal using SVR method, IEEE sponsored International Conference on Innovations in Intelligent, Instrumentation, Optimization and Signal Processing held at Karunya University, Coimbatore, India during March 2nd and 3rd 2013.
- Organized webinars and invited talks for students, faculties and research scholars
- Faculty coordinator for the BIORGANZA-2022, Symposium conducted by Dept. of Biomedical Engineering, SRMIST, Ramapuram
 - Attended research evaluation workshop conducted by Visvesvaraya PhD Scheme, Ministry of Electronics and Information Technology, Andhra University, Vishakapattanam, 2017.
 - ICMR sponsored seminar on 'Recent trends in Medical Image Diagnostics' held at Kongu Engineering College, Tamil Nadu, India during November 2012.

AWARDS AND ACHIEVEMENTS

- Received prestigious Visvesvaraya PhD fellowship by Ministry of Electronics and Information Technology, Govt. of India for the period 2015-2020 with a monthly fellowship of Rs. 43,650.
- Obtained funding from Govt. of India under Visvesvaraya PhD Scheme under Ministry of Electronics and Information Technology to participate in IEEE-EMBS Conference on Biomedical Engineering and Sciences (IECBES) Sarawak, Malaysia.
- Rank holder for M.Tech program in Karunya University.
- Successfully completed and achieved Elite on NPTEL courses.

WORK EXPERIENCE

- **Assistant Professor SRM Institute of Science and Technology, Ramapuram**
Working as Assistant Professor in the **Department of Biomedical Engineering** from 2021 till date
- **Teaching Assistant**
SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu from 2015-2021
- **Assistant Professor, Govt. Model Engineering College, Kochi, Kerala**
Worked as Assistant Professor in the **Department of Electronics and Biomedical Engineering from 2013-2015**

RESPONSIBILITIES HELD

- Department NAAC Coordinator from 2021-till date
- Department NBA Coordinator from 2023-till date
- Department AAA coordinator from 2022-till date
- Faculty coordinator for the BIORGANZA-2022, Symposium conducted by Dept. of Biomedical Engineering, SRMIST, Ramapuram