# JEENAL RAMBHIA

Email: jeenal.rambhia@fragnel.edu.in

---

## Total Experience  8 years

## Qualifications: Pursuing Ph.D., M.Tech(EXTC), BE(EXTC)

## Area of Interest: Biomedical Signal Processing, Neuroscience, Artificial Intelligence.

## Subjects Taught: Data structures and algorithms, Artificial neural network and fuzzy logic, Discrete Time Signal Processing, Image Processing and Machine Vision. Computer Networks, Multimedia and Virtual reality, Python, Principles of digital techniques, Basic Electronics, Electronic instruments and measurements, Analog communication, Digital Communication, Mobile communication, Computer fundamentals, Maintenance of Electrical Equipment, Professional practice, Project guide for final year projects.

## Papers Published:

- J. Rambhia and R. Sutar, "Cogni-Sonance: Navigating the Neurological Orchestra of Imagined Speech," *2024 International Conference on Artificial Intelligence and Emerging Technologies*, Noida, India, 2024.**(BEST PAPER AWARD).**
- Rambhia J, Sutar R. Verification of Source Activations in a 3D Brain Model Using 'CLEVER' Algorithm for Mental Arithmetic Conditions. Annals of Neurosciences. 2024;0(0). doi:10.1177/09727531241234727 **(Scopus).**
- J. Rambhia and R. Sutar, "Classification of Mental Arithmetic States Using Single Electrode," *2023 International Conference on Next Generation Electronics (NEleX)*, Vellore, India, 2023, pp. 1-4, doi: 10.1109/NEleX59773.2023.10421525.
- J. Rambhia and A. Naik, "Analysis of Different Heart Rate Monitoring and Pre-Processing Techniques for ECG," 2019 International Conference on Nascent Technologies in Engineering (ICNTE), Navi Mumbai, India, 2019, pp. 1-5, doi: 10.1109/ICNTE44896.2019.8946042.
- Rambhia, Jeenal, Ameya Naik, and Nitin Nagori. "Arrhythmia Detection and Classification by Neural Network Using ECG Features." In the 2nd International Conference on Advances in Science & Technology (ICAST). 2019.
- Presented Poster at **Research Colloquium** "Decoding Hand Gestures" organized by Sardar Patel Institute of Technology.

## Certifications:
- On going Biomedical Signal Processing **(NPTEL).**
- Making Learning Engaging Through Interactive Games **(NPTEL)-Silver Elite-87%.**
- Developing Soft Skills and Personality **(NPTEL)-Silver Elite-83%.**
- Fuzzy logic and Neural network **(NPTEL)-Silver Elite-80%.**
- Introductory neuroscience and neuro instrumentation **(NPTEL)-Silver Elite-76%.**
- Digital Image Processing  **(NPTEL)-Silver Elite-76%.**
- Deep Learning **(NPTEL)-Elite-70%.**

- Good Clinical Practices **international certificate** by National Institute on Drug Abuse (USA) valid till September 2026.
- Presented Poster at **Research Colloquium** "Decoding Hand Gestures" organized by Sardar Patel Institute of Technology.
- Peer Reviewer Course by **Elsevier**.

## Seminars and Training:

- Attended one week FDP on GAN and Autoencoders for computer vision by Thadomal Shahani Engineering College Bandra.
- Attended one week FDP on Emerging Significance of Artificial Intelligence in Biomedical, Industry 5.0, Cyber Security and Data Forensics by VPM Maharshi Parshuram College of Engineering.
- Attended FDP on First Hand experience on SPSS Introductory module by research foundation of India.
- Attended a one week FDP on "Applications of AI & ML in signal processing and Communications" by NIT Warangal.
- Attended a one week FDP on "Recent Advancement in Biomedical Signal & Image Processing" at VJTI.
- Attended a one week training program on "Practical approaches in wireless communications" at K.J Somaiya College of Engg.
- Attended a one week training program on "Outcome-based Education-innovative teaching, learning process, assessment and evaluation" at VESP polytechnic.
- Attended one week training program on "Mobile Computing" at Thakur polytechnic.
- Attended a one week training program at Father Agnel polytechnic for "Renewable energy sources".
- Attended a one week training program at Crompton Greaves organized by MSBTE.