

Vaibhav Kiran

Karnataka, India / Vaibhavkiran.work@gmail.com / (+91) 7736605542 / LinkedIn - Vaibhav Kiran

Professional Summary

Second-year Biomedical Engineering student with a strong focus on medical device prototyping. Experienced in developing innovative solutions like a Parkinson's alert system, heart rate monitors, and a universal radio programming kit. Currently exploring Python and AI to enhance healthcare technology through intelligent and data-driven solutions. Actively involved in leadership as the President of the Biomedical Technical Club and part of the Corporate Relations portfolio in the E-Cell, driving collaboration between students and industry.

Education

Karunya Institute Of Technology And Sciences, Coimbatore

B.Tech, Biomedical Engineering (AI & ML)

2023 - Present

Sri Sathya Sai Loka Seva P.U. College, ALIKE

Class - XII | PCB | 93%

2021

Sri Sathya Sai Loka Seva Vidya Kendra Alike

Class - X | 82%

2020

Projects

Safety Protocol System on Street Light Model

- Designed an embedded system prototype that integrates emergency alerts into smart streetlights to ensure rapid response during road accidents.

Parkinson's Alert System

- Developed a wearable device that detects abnormal motion patterns and triggers alerts for early signs of potential falls in Parkinson's patients..

Tremor Detector for Parkinson's Patients

- Created a real-time monitoring system using sensors to detect and quantify hand tremors, aiding in clinical assessment and patient tracking.

Universal Radio Programming Kit Using Quantum's

- Engineered a configurable radio programming tool capable of adapting to various radio models, supporting use in field operations by MP police.

Oxygen Saturation Monitor Using MAX30100

- Implemented a wearable device that continuously monitors SpO₂ levels, enabling early detection of respiratory distress.

ECG Monitoring System Using AD8232

- Assembled a compact ECG system capable of capturing and visualizing heart signals for educational and diagnostic purposes. .

Heart Rate Monitoring System

- Developed a basic heart rate monitor for real-time pulse tracking using microcontrollers and optical sensing modules

Face Mask Detection using Ski-kit learn and Open-CV

- Develops Detects whether a person is wearing a face mask in real-time using webcam

Skin disease Detextion using Image Classification

- Train a basic classifier to detect whether an image has eczemam, acne, or is healthy

Professional Development

Conferences & Symposiums

- Represented University at Smart India Hackathon 2024, Bhopal
- Represented University at IIT Delhi E-Cell Conference

Certifications

- English language for competitive exam (NPTEL)
- Electronic system design : hands on circuits and PCB design with CAD Software (NPTEL)
- Electrophysiology of Heart (NPTEL)
- Digital Marketing (COURSERA)
- Medical Equipment and its Calibration

Software & Tools

- Microsoft Office, LabVIEW, AutoCAD, MATLAB, Python, Arduino IDE, EAGLE, Spyder, VS Code

Soft Skills

- Critical Thinking, Leadership, Communication, Strategic Planning, Research, Teamwork

Achievements

Co-Curricular

- Merit Scholarship (INR 40,000) – Karunya Institute of Technology
- 1st Prize – Paper Presentation at ICB International Conference, SRMIST
- All-Rounder Award – Central Academy Sr. Sec. School

Extra-Curricular

- President and Head, REGEN-X - Technical club
- Senior Coordinator for Corporate Relations - E-cell
- District-Level Champion – Swimming and Karate

Internships

- Dizbi Private Ltd (With Stipend)
- Vivnovation (With Stipend, Ongoing)