PARINITHA KOMPALA

parinithakompala216@gmail.com| +91-9600569367 | https://www.linkedin.com/in/parinitha-kompala/

EDUCATION

Rajalakshmi Engineering College, Anna University | ***Chennai, India*** *2017 – 2021*

Bachelor of Engineering in Biomedical Engineering

Coursework*: Electronic Device, Physiological Modelling, Microprocessor and Microcontrollers, Biomaterials, Radiological Equipment, Diagnostic and Therapeutic Equipment, Rehabilitation, Electric circuits, Electronic Devices, Circuit Theory, Biomechanics, Human Physiology & Anatomy, Digital Image Processing, Sensors and Measurements, Medical Optics, Digital Signal Processing.*

Shrishti Matriculation Higher Secondary School | ***Vellore, India***

Higher secondary - Mathematics and Sciences - 88.3% *2015 – 2017*

Coursework: *Algebra I & II, Calculus I & II, Plane Geometry, Statistics, Chemistry, Physics, Biology, Environmental sciences.*

Secondary School - 96.5%

WORK EXPERIENCE

Raffles Pharmaceuticals ***Tirupati, India***

Quantitative Data Science Intern *Nov '19 – Jan'20*

- Analyzed biomedical datasheets to generate and prioritize actionable hypothesis as a part of collaborative research with other pharmaceutical companies and worked primarily on the projects undertaken in the clinical research department.
- Wrote python scripts to perform various tasks on files and databases as a well as expose them in a form that is accessible to web lab users.
- Presented programs to hospitals, tested equipment's and coordinated activities.

Diagnostic and therapeutic equipment lab ***Chennai, India***

Undergrad research Intern *Jan '20 – current*

- Worked with industry and academia experts to develop 'Seizure alert system', to replace heavy machinery required and develop an immediate response system.
- Illustrated inferential statistic to perform literature survey of seizure cases.
- Discussed and debated on more ideas and plans to work on developing cost effective therapeutic devices and recovery plans.

Sri Venkateshwara Institute of Medical Science ***Tirupati, India***

Research Intern *Nov '18 – Jan '18*

- Conducted literature survey focusing on transitioning from timeworn equipment to latest equipment particularly concentrating on auto analyzer, ventilators and scanning equipment such as MRI, PET, CT.
- Worked on building a rotational program for procuring and distributing medical equipment and set ups across various rural villages across Andhra Pradesh state.
- Theorized small Proof of concepts for internal bio-science projects and interdisciplinary projects.

SKILLS

Programming Languages	C/C++, Python.
Data Analysis	R, MATLAB, LabVIEW, Python – NumPy, Pandas, Matplotlib, Plot.ly
Machine Learning	Python - SciKit Learn
Software suites	R studio, Jupyter Notebook, Tableau, Flourish, Power BI, Excel (Pivot Tables)
Hardware	Soldering, Arduino
Soft skills	Writing technical documentation, Compliance with regulation and standards, Time management

MAJOR PROJECTS

Seizure Alert System

- Utilized temperature and pressure sensors along with buzzers and LEDs interfacing with Arduino modules and wi-fi module to device this wearable device that can replace electro-encephalography, which was the only effective tool for confirming epileptic seizures.
- Interfaced the modules with Arduino and the connected with the backend sensors and front end LEDs**.**

Detection of Fluid Filled Regions in Chest X-ray Images

- Extracted a b/w image from gray scale image using imbinarize and then Inserted Horizontal and Vertical threshold lines, while running the code the infected area in the X-ray is marked in the output.
- Coded in MATLAB to read the images, loop through them and detect the anomaly using the inserted threshold lines.
- Implemented neural engine using python to check the accuracy of the detection.

ACHIEVEMENTS & CERTIFICATIONS

- Awarded first prize in paper presentation conducted by Sri Sai Ram Engineering college, paper presented- seizure alert system.
- Hands on training on unified technology learning platform for embedded systems applications, project done- fun with flags.
- Briefed on detection of fluid filled regions in chest x-rays images using MATLAB.
- Showcased in Texas Instrument, India Innovation challenge design contest 2020.
- Certified in Fundamentals of digital marketing- google digital unlocked.
- Cracked MATLAB and Deep Learning Onramp-MathWorks certification.
- Qualified in Biomedical Nanotechnology - Indian Institute of Technology, Roorkee, NPTEL.