# BHAVYA CHANANA

#### Education

Vellore Institute of Technology, Chennai Bachelor of Technology in Computer Science

Delhi Public School - Risali Sector, Bhilai Computer Science; Class 12 CBSE Boards

Delhi Public School - Risali Sector, Bhilai Class 10 CBSE Boards

# Work Experience

#### IIIT - Nava Raipur

Sept 2023 - present

Raipur, CG

Machine Learning Research Intern

- Researched and implemented green light spectroscopy for hemoglobin prediction, contributing to the development of a Point of Care (POC) solution
- Developed a regression model to predict hemoglobin levels from PPG signals for the detection of anemia.
- Enhanced the accuracy of PPG data using noise reduction and signal preprocessing.
- Utilized Python, and libraries numpy, OpenCV, matplotlib, scikit-learn to analyze PPG signals and extract relevant features for hemoglobin level estimation
- Independently conducted data collection efforts by performing PPG signal measurements and corresponding hemoglobin level tests.

# Steel Authority of India Limited - Bhilai Steel Plant

Dec 2023

 $SDE \ trainee$ 

Bhilai, CG

- Developed a full stack Android database management app for servers from scratch using React Native
- Handled backend using Express, Node.js and PostgreSQL for efficient data management
- Implemented CRUD functionalities through FETCH API for seamless frontend-backend communication
- Enabled dynamic server creation and secure deletion based on IP addresses as Primary Key
- Designed feature for retrieving and displaying comprehensive server information

# Projects & Research

- ToDoList Web App | Developed a ToDoList web application using Flask, implemented CRUD functionality, managed todolist data with SQLAlchemy, and successfully hosted the website on Heroku.
- College Search & Application Tracker | Built a website using REACT to help students streamline UG selection process. Scraped all the Indian UG colleges data in JSON and used firestore to handle the database, for google solution challenge 2023
- HackHub | Collaborated with a team to build a website for the annual IEEE hackathon. Created components for the landing page using REACT.

#### Technical Skills

Languages: Python, R, C, C++, HTML/CSS, JavaScript, Matlab, SQL, Shell

Technologies/Frameworks: GitHub, React, React-Native, Node.js, Express, PostgreSQL, Bootstrap, Flask, MySQL, ML Softskills: Leadership, Management, Teamwork, Communication, Analytical & Problem solving

# Leadership / Extracurricular

- Member, Google Developers Student Club VIT Chennai, Web Dev Team
- Member, IEEE Computer Society, VIT Chennai
- Participated in HackerSpace hackathon conducted by VIT Chennai
- Member of organizing committee, Hackathon VIT Chennai

#### Certifications

- AZ 104, Microsoft Azure
- AWS Academy Cloud Foundations, Amazon Web Services
- Introduction To Front End Development by Meta, Coursera
- E-Business, NPTEL
- Programming, Data Structures and Algorithms using Python, NPTEL