PRAVIN KUMAR MAHATO

praveenmahato026@gmail.com | +91 9969636009
https://www.linkedin.com/in/pravin-kumar-mahato-433194173
https://github.com/pravinkumarmahato

Work Experience:

➔ **Software Engineer, Kaiburr, Cambridge, MA USA (15 Nov 2023 – Present):**
- **Full-stack development using** Java (Spring Boot, PrimeFaces)**,** React.js**, and** Python (Flask, Django)**.**
- **Worked on** bug fixes**, feature enhancements, and UI/UX improvements for internal web apps.**
- **Customized** BPMN.js**, developed** RESTful APIs **with** Swagger**, and improved** Redash dashboards **and** Plotly charts**.**
- **Created and deployed** Django-based APIs**, containerized apps using** Docker**, and performed** ML model fine-tuning**.**
- **Implemented** CRUD operations with MongoDB**, explored** Whoosh **for full-text search, and supported** AI workflow prompt engineering**.**

➔ **Intern, Curaksha, Mumbai (1 Nov 2020 – 30 June 2021):**
- Designed intuitive, user-friendly interfaces and performed responsive testing for websites.
- Conducted bug testing and collaborated on development and design improvements.

Projects:

➔ **Human Presence Detection Using RF Signals [Document Link]**
- Collected **Received Signal Strength Indicator (RSSI)** from Esp32 and applied various statistical parameters over the **RF Signal** and successfully detected the presence/absence of a Human in a controlled environment.

➔ **Lung Capacity Check [Presentation Link] [Document Link]**
- Innovated a low-cost and easy-to-use solution that calculates various **Spirometry parameters** as well as performs **Inventive Spirometry**.
- Applied the **Bernoulli-Venturi Principle**. Setup **MongoDB** database and used **Matplotlib** to analyze the patients' results.

➔ **Crop Health Analysis using NDVI [Link]**
- Calculated the health of the crops on a Web Application interfaced using **Flask.**
- The health of the plant is known to us by the **Normalized Difference Vegetation Index (NDVI)** which is calculated by combining **RGB & NIR pixels** using the PIL library in Python**.**

➔ **Face Recognition Based Security Camera and Door Unlock System [Document] [Link]**
- **Open-CV** Python and **Internet of Things (IoT)** technologies are used in this project.
- It contains capabilities such as **recording live streaming video**, checking if a person is registered or not when it **identifies a face**, and then it **sends an email / SMS**, to the **administrator**. The administrator can then view the **live streaming video** from the **security camera** on the **Mobile/Desktop App** and **grant access** to **open the door**.

➔ **RFID Based Attendance Management System [Presentation Link] [Link]**
- The project is based on **RFID** and **Internet of Things (IoT)** technology.
- **RFID cards** can be used to **track attendance**.
- It also includes a website for an **Attendance Management System**, to which I have granted **separate access** to the **administrators, faculty, and students**.

Technical Skills:

➔ **Languages:** Python, HTML, CSS, JavaScript, Java,
➔ **OS:** Windows, Linux (Ubuntu, Ubuntu Server, etc.), Raspberry Pi OS
➔ **Frameworks:** Bootstrap, Django, Flask, Kivy, OpenCV, Numpy, Pandas, Matplotlib, Reactjs,
➔ **Database:** MySQL, Oracle, PostgreSQL, Mongo DB

Academic Qualifications:

Course	College/School	%/CGPA
MCA (2022-2024)	Vellore Institute of Technology, Vellore	8.31 CGPA
B.Sc. IT (2019-2022)	Kishinchand Chellaram College, Mumbai	9.20 CGPA

Extra-Curricular Activities and Achievements:

➔ AIR 80 in VITMEE Entrance Exam
➔ 1st Position at Internal Hackathon by MCA Department, VIT Vellore
➔ 2nd Position at KC College Internal Hackathon
➔ 2nd Runner Up at Mastek's Deep Blue Season 7 among the 282 registered teams.
➔ Participated in HackSRM 3.0 a virtual hackathon Conducted by SRM University AP and NextTechLab AP.