Kshitij Sagar Hupare

Ichalkaranji, Kolhapur, Maharashtra, India

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LinkedIn | Portfolio | GitHub

Technical Skills

Programming Languages	Python (Pandas, NumPy, PyQt5, pymodbus, pyodbc), Java, JavaScript
Full-Stack/Frameworks	React.js, Node.js, Flask, FastAPI
Databases	SQL, NoSQL, MongoDB, MySQL, SQL Server (SSMS)
Cloud & DevOps	AWS, Docker, Git, GitHub
Automation/Other	PLC, SCADA, VS Code, QtDesigner

Professional Experience

Python Developer Intern | Cybernetik Technologies

Pune, Maharashtra | Dec 2024 – Present

- **Contributed** to 3 industrial automation projects, focusing on developing **Building Management System (BMS) Firmware** and creating responsive graphical user interfaces (GUIs).
- **Engineered** internal web applications, including a company-wide **Task Management Application** and a **Production Line Data Visualization** dashboard, utilizing **Python (Flask/FastAPI)**, **React**, and **SQL SSMS/MongoDB**.
- **Developed** high-efficiency code for industrial communication protocols using specialized Python libraries (**pymodbus, pyodbc**), enhancing data exchange across systems.
- **Gained practical knowledge** of industrial automation concepts, including **PLC** and **SCADA** systems, bridging IT and Operational Technology (OT) environments.

Industrial Projects

1. **BMS Activation & Battery Testing Validation (EOL)**
- **Technologies:** Kevsar-CAN Module, Python-CANlib, PyModbusTCP.

- Developed **Battery Management System** activation**, Firmware** development, and **EOL testing validation** for electric vehicle batteries.

2. **Full-Stack Textile Web-Application**
- **Technologies:** React, JavaScript, Node.js, MongoDB, AWS (EC2, Route 53, S3, Amplify)
- **Designed and developed** a full-stack business application incorporating features for **Inventory Management, CRM, Marketing, and Sales tracking**.
- **Successfully deployed** the application using **AWS services**, enabling the system to service approximately **35 textile firms**.

3. **Digital Shopping Trolley (IoT/Automation Project)**
- **Technologies:** Raspberry Pi, Python, AWS EC2/S3, Sensors (IR, Barcode scanner)
- **Architected** an innovative IoT solution for a self-checkout system, providing **automated billing** and real-time inventory updates.
- **Quantifiably improved** the shopping efficiency, reducing the average checkout time by **43%** and enhancing the overall user experience.

Education

Walchand Institute of Technology, Solapur, Maharashtra, India
- **Bachelor of Technology (B.Tech.) in Computer Science and Engineering.**
- **Graduation:** July 2024
- **Academic Performance:** CGPA of **8.68 / 10.0**

Technical Certifications

- .NET Full Stack Developer Certification
- Artificial Intelligence Primer Certification
- DevOps Foundation Certification
- Python Programmer Certification
- Java Foundation Certification