HEET MEHTA

Brooklyn, New York | mehtaheet5@gmail.com | LinkedIn | Portfolio

SUMMARY

Aspiring software engineer with experience in full-stack development and machine learning. Developed a Bluetooth Low Energy (BLE) based visitor tracking system at Bhabha Atomic Research Centre for accurate indoor positioning and collaborated on a predictive maintenance system at Encardio Rite to improve infrastructure reliability. Aims to leverage problem-solving and technical skills to contribute effectively to software development projects for enhanced outcomes

EDUCATION

New York University, Tandon School of Engineering

May 2027 (Expected) Brooklyn, New York

Masters in Computer Science

Relevant Courses: Software Engineering, Design & Analysis of Algorithms, Machine Learning

Vellore Institute of Technology

June 2025

Bachelor of Technology in Information Technology

Tamil Nadu, India Cumulative GPA: 9.14/10

EXPERIENCE

Bhabha Atomic Research Centre (BARC)

December 2024-May 2025

Mumbai, India

Project Intern

- Developed and deployed a Bluetooth Low Energy (BLE) based visitor tracking system using Python, BlueZ, and multithreaded socket programming to monitor and detect up to 500 Bluetooth devices in real-time.
- Implemented RSSI-based trilateration algorithms for accurate indoor positioning, leveraging NumPy, SciPy, and Kalman filtering to achieve 1-meter localization accuracy.

Encardio Rite May 2024 - August 2024

Software Development Intern

Lucknow, India

- Collaborated with cross-functional teams to develop a predictive maintenance system using Python, Scikit-learn, and AWS Lambda, enhancing the safety and reliability of bridges, tunnels, and dams. This reduces the critical infrastructure failures by
- Integrated and streamed sensor data from more than 20 geotechnical monitoring systems via MQTT and AWS IoT Core, with real-time dashboards using Plotly, D3.js, and CloudWatch for structural health monitoring.

UNIVERSITY PROJECTS

Titan - ML Pipeline for Retail Analytics

August 2024

- Built a modular machine learning pipeline using Python, Scikit-learn, Docker, and Apache Airflow to automate customer churn prediction for a mid-sized retail business, integrating real-time data ingestion, preprocessing, training, and deployment.
- Reduced model training time by 22% and improved pipeline reliability by implementing data caching, feature selection, and batch scheduling, enabling scalable deployment and faster iteration cycles.

Ether Auction October 2023

- Designed and launched a secure, decentralized auction platform using Solidity smart contracts and Ethereum to enable transparent bidding and ownership transfer for digital assets across 15+ product categories.
- Integrated Web3.js, MetaMask, and Ganache for blockchain interaction, reducing transaction overhead by 3% through gas optimization and efficient contract design.

PUBLICATIONS

Journal Name: IEEE Xplore

Paper Title: Applications of Machine Learning in Detecting Unethical Sources of Raw Materials in Supply Chains in the Cosmetic

Industry

Issue: 4th International Conference on Sustainable Expert Systems (ICSES 2024)

SKILLS

Languages Python, Java, Swift, C, C++, JavaScript, SQL

Libraries/Frameworks React.js, Xcode, Scikit-learn, TensorFlow, PyTorch, Pandas, CICS Git, Docker, Streamlit, Firebase, Postman, VS Code, JIRA, Spark **Tools**

Cloud & DevOps AWS, Google Cloud, GitHub Actions Software Microsoft Office, Google Suite, LaTeX

Domains Full-Stack Development, Machine Learning, Data Analytics, Blockchain (Solidity, Web3.js)