HEET MEHTA

Brooklyn, New York | (+91) 9372530600 | mehtaheet5@gmail.com | [Linkedin](#) | [Portfolio Website](#)

SUMMARY

I am an aspiring software engineer with experience in full-stack development and machine learning. Engineered an indoor visitor localization solution using Bluetooth Low Energy (BLE) at Bhabha Atomic Research Centre and co-developed an intelligent infrastructure health monitoring platform at Encardio Rite to improve reliability. I aim to leverage my technical skills to contribute effectively to software development projects for enhanced outcomes.

EDUCATION

New York University, Tandon School of Engineering   **September 2025-May 2027 (Expected)**
Masters in Computer Science   Brooklyn, New York
Relevant Courses: Software Engineering, Design & Analysis of Algorithms, Machine Learning

Vellore Institute of Technology   **September 2021-June 2025**
Bachelor of Technology in Information Technology   Tamil Nadu, India
GPA: 9.14/10

EXPERIENCE

Bhabha Atomic Research Centre (BARC)   **December 2024-May 2025**
Project Intern   Mumbai, India
- Built and deployed a BLE-driven real-time visitor monitoring solution 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 build a machine learning-powered infrastructure diagnostics tool using Python, Scikit-learn, and AWS Lambda, enhancing the safety and reliability of bridges, tunnels, and dams. This reduced critical infrastructure failures by 40%.
- 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
Tools	Git, Docker, Streamlit, Firebase, Postman, VS Code, JIRA, Spark
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)