# HEET MANISH MEHTA

Mumbai, Maharashtra | P: +91 9372530600 | mehtaheet5@gmail.com | www.linkedin.com/in/heet-mehta/ | Portfolio

### **EDUCATION**

#### VELLORE INSTITUTE OF TECHNOLOGY

Vellore, Tamil Nadu June 2025

Bachelor of Technology

Major in Information

Major in Information Technology Cumulative GPA: 9.14/10;

Relevant Coursework: Data Analysis, Software Engineering; Operating Systems; Data Structures & Algorithms; Artificial Intelligence; Machine Learning; Computer Networks; Internet Of Things; Web Development; Information Security Analysis.

## PROFESSIONAL/INTERNSHIP EXPERIENCE

# ENCARDIO RITE PRIVATE LTD.

Lucknow, Uttar Pradesh May 2024 - August 2024

Software Development Intern

- Engineered and executed a predictive maintenance system using Python and machine learning, enhancing the safety and reliability of bridges, tunnels, and dams. This reduces the critical infrastructure failures by 40%
- Integrated sensor data from 20 geotechnical monitoring systems to provide continuous health assessments of mega structures.
- Created interactive dashboards using React.JS and D3.js to visualize structural health metrics, predictive analytics and maintenance alerts enabling engineers to make informed decisions quickly.

## BHABHA ATOMIC RESEARCH CENTRE (BARC)

Mumbai, Maharashtra

Project Intern

August 2023-September 2023

- Developed and deployed a Bluetooth Low Energy (BLE) based visitor tracking system using Raspberry Pi and BLE beacons to monitor and detect up to 500 Bluetooth devices in real-time.
- Implemented trilateration algorithms for accurate indoor positioning, achieving an accuracy of a 1-meter radius in device localization.

# **UNIVERSITY PROJECTS**

# DIABETIC RETINOPATHY DETECTION APP

August 2024

- Built an AI-powered web application for detecting diabetic retinopathy from retinal images, using Streamlit, Python, and Scikit-learn, which enabled immediate, on-demand screening.
- Achieved a detection accuracy increase of 25% by refining the machine learning model with advanced hyperparameter tuning and cross-validation techniques.
- Reduced prediction processing time by 30% through image preprocessing optimizations and model inference improvements.

ETHER AUCTION October 2022

- Designed and launched EtherAuction, an innovative auction platform leveraging the Ethereum blockchain to facilitate seamless transactions and secure bidding on a diverse range of 15 products.
- Executed smart contract functionalities using Solidity and integrated Web3.js for Ethereum blockchain interaction reducing transaction fees by 3%

#### **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

Paper Type: Conference Paper

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

#### **MOZILLA FIREFOX CLUB-VIT**

Committee Member

Vellore, Tamil Nadu February 2023– April 2024

- Coordinated events attended by 200+ participants annually, promoting web literacy and open-source contributions.
- Conducted bi-monthly workshops with an average attendance of 50 members, enhancing the skills in the field of web development and Firefox browser customization.
- Organized annual hackathons with 150+ participants resulting in 20 prototype applications developed using Mozilla technologies.

# **CERTIFICATIONS AND TRAINING**

- Applied Data Science With Python-IBM
- Data Analysis With Python-IBM
- Data Visualization With Python-IBM
- Python 101 for Data Science-IBM,

#### TEACHING AND LEADERSHIP EXPERIENCE

#### **BECOMING I FOUNDATION-VIT (NGO)**

Head of Finance Department

Vellore, Tamil Nadu January 2023-January 2024

- Managed a team of 120 students to ensure accurate budgeting, reporting, and compliance.
- Secured and managed sponsorships, increasing financial support for underprivileged students by 5% over the previous year.
- Formed strategies to optimize resource allocation to reduce operational costs by 4% and maximize impact.

#### **SKILLS**

Non-Technical: Public Speaking, Workshop Delivery, Technical Writing, Peer Tutoring, Team Mentorship, Event Coordination, Budget Management, Stakeholder Communication, Time Management, Multitasking, Documentation, Reporting, Resource Allocation.

**Technical**: SQL, Python, Java, TensorFlow, PHP, Javascript, HTML/CSS, MATLAB, Data Analysis, C++, C, Typescript, React.JS, Firebase, Tailwind, Word, PowerPoint, Prompt Engineering, Scikit-Learn, Keras, PyTorch, Pandas, NumPy, Matplotlib, Seaborn, OpenCV, Natural Language Processing (NLP), Model Evaluation, Feature Engineering, Hyperparameter Tuning.

**Awards:** 2nd Place in Maharashtra-All India Open English Scholarship Examination (2012); 3rd Place in Maharashtra-French Olympiad (2017).

## PERSONAL DETAILS

Name: Heet Manish Mehta Date of Birth: 8th May 2003

Languages Known: Fluent in English, Hindi, Gujarati; Conversational Proficiency in French, Spanish, Marathi.

Passport Number: U5812064