AIMAAN KHAN

+91 99877 86026 | aimaanjkhaan@gmail.com | LinkedIn | Portfolio | GitHub

TECHNICAL SKILLS

- Python
- MERN Stack
- AWS
- Product Development
- SQL
- JavaScript
- Data Analysis
- Research
- MongoDB
- Machine Learning
- Embedded Systems
- Git and GitHub

EXPERIENCE

Python Developer Intern | *BeamOptics Scientific (July 2025 - October 2025)*
- Developed the complete software stack on Raspberry Pi 4 by integrating sensors, backend logic, and UI design, enabling real-time milk quality analysis.
- Built a predictive model by applying statistical methods that estimated MBRT time before completion.
- Automated data acquisition and visualization workflows in Python, enhancing consistency and analysis efficiency.
- Led end-to-end lab testing, debugging, and deployment, ensuring reliable and ready-to-deploy machine performance.

Web Developer Intern | *Prism Cybersoft (June 2024 - July 2024)*
- Created a responsive website by developing HTML/CSS/JS pages that improved accessibility and navigation for software documentation.
- Enhanced user experience by structuring layouts and optimizing cross-browser performance.

Software Developer Intern | *cloudyBoss* (*August 2023 - June 2024)*
- Built a cybersecurity model by training on STIX-compliant threat signals, improving endpoint detection automation.
- Developed and integrated ML modules by contributing to the ANIMA engine within the cB stack, strengthening AI security features.

PROJECTS

Automated MBRT (Methylene Blue Reduction Test) Machine - *Raspberry Pi 4, Python, Kivy, Waveshare Display.*
- Engineered a fully automated MBRT system by fusing optical sensing, data modeling, and UI logic that accelerated milk-quality testing.

Cyber-Attack Detection Model - Python, scikit-learn, Random Forest
- Built a Random Forest classifier by performing data preprocessing and feature engineering that improved malicious-traffic detection.

AI-Based Timetable Scheduler - Node.js, Express, MongoDB
- Developed a scheduling engine by encoding teacher, room, and subject constraints that generated conflict-free academic timetables.

Toxic Comment Detector - Flask, Python, TF-IDF, Logistic Regression
- Designed a text-classification web app by applying NLP techniques that detected and filtered toxic comments in real time.

Additional Projects

- **IoT Water-Irrigation System** – Automated soil-moisture monitoring and pump control.
- **Vehicle Location & Speed Tracker (IoT)** – Real-time GPS tracking dashboard.

EDUCATION

Bachelor of Engineering in Computer Engineering (Honors in Cyber Security) | University of Mumbai (2025)
12th HSC | RIMS International Junior College (2020)
10th SSC | St. Mary's High School (2017)

PUBLICATION

AI powered timetable scheduler and management | JETIR2410528
IoT-Based Vehicle Location and Speed Monitoring for Parental Peace of Mind | JETIR2404639