

MD FAISAL ISLAM

Machine Learning Engineer

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PROFESSIONAL SUMMARY

Computer Science student and AI/ML engineer with hands-on experience building computer vision and applied-AI systems, including object detection, multi-object tracking, and LLM-powered features. Combines a machine learning foundation with full-stack development skills to design, ship, and deploy end-to-end ML products. Seeking to bring this cross-disciplinary skill set to an ML Engineering role.

TECHNICAL SKILLS

Machine Learning / CV: YOLOv11, YOLOv26, TensorFlow, PyTorch, OpenCV, ByteTrack, Object Detection, Object Tracking, Model Evaluation, Dataset Preparation (VisDrone)

AI / LLM Integration: Gemini API, Prompt Engineering, RAG-style Q&A, Conversational AI

Languages: Python, JavaScript (ES6+), TypeScript, C

Frameworks & Backend: FastAPI, React, Next.js, Node.js, Express.js, REST APIs, JWT Authentication, Auth0

Databases: MongoDB, PostgreSQL, MySQL

Tools & Practices: Git, GitHub, Linux, Agile/Scrum, Component-Based Architecture, Performance Optimization, MS Excel, PowerPoint

WORK EXPERIENCE

AI/ML Intern | Ants June 2026 – Present

Work governed by an NDA; details below are described at a general level.

- Contributed to the computer vision pipeline of an AI-powered surveillance system, working on detection and tracking components for real-time monitoring
- Built an internal project-tracking tool with a Kanban board and team calendar to plan sprints, assign tasks, and track delivery timelines
- Collaborated with the engineering team to integrate the internal tooling with existing workflows, improving task visibility across the team
- Applied ML and software engineering best practices in a production-oriented, fast-paced startup environment

Junior Frontend Developer | Phoenix Bits August 2025 – March 2026

- Engineered scalable front-end systems using React, Next.js, and TypeScript, delivering production-ready features end-to-end
- Optimized rendering logic and eliminated unnecessary re-renders, reducing load times by ~20%
- Led API integrations and implemented secure authentication and role-based access control using Auth0
- Collaborated cross-functionally in Agile development cycles to ship high-impact features under tight timelines

MACHINE LEARNING & AI PROJECTS

Drone Traffic Analyzer — Vehicle & Pedestrian Detection/Tracking — YOLOv11, YOLOv26, OpenCV, ByteTrack, Python

- Built an object detection and multi-object tracking system for vehicle and pedestrian counting from aerial/drone footage, trained on the VisDrone dataset
- Designed lane- and intersection-level counting zones with corrected bounding-box orientation and a boundary region for intersection-area analysis
- Deployed a live web frontend for the system (drone-traffic-analyzer-frontend.vercel.app) to visualize detection and counting results

CourseMate — AI-Powered Learning Platform — React, Node.js, Express, MongoDB, Tailwind CSS

- Built a full-stack learning platform with AI-powered quiz generation, summarization, and Q&A features
- Designed interactive dashboards to visualize user engagement, progress, and performance metrics, and built tracking systems for behavioral insights

Dr. FelisCounsel — AI Chat Application — React, Node.js, Gemini API

- Built an AI-powered conversational assistant integrating the Gemini API to generate context-aware, empathetic responses in real time
- Designed a clean, accessible chat interface focused on smooth, responsive communication across devices

EDUCATION

Bachelor of Computer Science 2022 – 2026
BRAC University | CGPA: 3.4

Higher Secondary Certificate (HSC) 2019 – 2020
Adamjee Cantonment College | GPA: 5.00

Secondary School Certificate (SSC) 2017 – 2018
Adamjee Cantonment Public School and College | GPA: 5.00