Mohammad Kamrul Hasan

Education

Bangladesh University of Engineering and Technology

Bachelor of Computer Science and Engineering

Expected Graduation: April 2030

Dhaka, Bangladesh

Work Experience

DeveOfE

Sep 2019 - May 2023

Founder and Lead Developer Dhaka, Bangladesh

- Developed and maintained the organization's **WordPress blog**, improving page load speed and achieving **90+ scores** on performance scans.
- Led backend development for **cburst.ml**, designing a high-performance **FastAPI & PostgreSQL** backend capable of handling high concurrency, improving response time and scalability
- Designed and secured **cburst.ml** using **Express.js**, achieving **OWASP Top 10 security compliance** and top marks in vulnerability scans.

Projects

CloudBurst URL Shortener | Source Code

 $ExpressJS \mid FastAPI \mid PostgreSQL$

- Utilized security scanners (Sucuri, GTmetrix, New Relic Ping) to analyze and improve API & web app security.

The Mystic Menu API | Website | Source Code

FastAPI | Supabase | Gemini

- Built a Python FastAPI-based API, integrating Supabase for secure authentication.
- Designed a **LLM-powered** recipe generator, dynamically generating recipe descriptions based on user inputs.

NDESC-API | Source Code

Tinyhttp | Typescript | Firebase

- Developed a TypeScript-based RESTful API, ensuring efficient data handling and seamless integration.
- Implemented CI/CD pipelines with GitHub Actions, automating deployments and reducing manual effort on local machine

ML-Based Rainfall Prediction

Python | Scikit-learn | Matplotlib | NumPy

- Trained an ML model to classify real-life rainfall data, testing multiple algorithms (Regression, SVM, Decision Trees).
- Improved accuracy to 85%+ by feature engineering & hyperparameter tuning.
- Applied linear algebra & probability concepts for ML-based rainfall prediction and algorithm optimization

Technical Skills

Languages & Frameworks: Python (Intermediate), TypeScript (Intermediate), C (Intermediate), Assembly (Beginner), FastAPI (Intermediate), Express.js (Advanced)

Technologies & Tools: PostgreSQL (Beginner), Supabase (Beginner), GitHub Actions (Intermediate), CI/CD (Intermediate), Reverse Engineering (Beginner)

Other: API Development (Advanced), Security Best Practices (Intermediate), Performance Optimization (Intermediate)