TAMZEED MAHFUZ

• Dhaka, Bangladesh



in <u>Linkedin</u>

□ Portfolio Github

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SUMMARY

A full stack developer and research enthusiast with interest in system design, natural language processing, computer vision. Currently expanding knowledge in respective fields. Pursuing opportunities in software development projects, research works and machine learning fields.

PROJECTS

CareForAll

- Developed and deployed <u>CareForAll</u>, a medical donation platform built using microservices architecture
- Used FastAPI for backend services and NextJS for frontend, , Postgres as database for each microservice.
- Employed Kafka for event driven architecture, gRPC for inter service communication.
- Implemented observability stack using Prometheus, Grafana, Loki, Jaeger.
- Built CI/CD pipeline using github actions, deployed on DigitalOcean Kubernetes.

Foodhub

- Created and deployed Foodhub, a web-platform for foodlovers. Implemented the entire project following standard microservices architecture.
- Used Spring Boot and FastAPI for backend, NextJS for frontend.
- Implemented full CI/CD pipeline using github actions, and deployed the entire project on Google Kubernetes Engine.

Ecom-app

- Developed and deployed ecom, a demo microservices ecommerce app.
- Used FastAPI, NextJS, gRPC, Kafka, Prometheus, Grafana
- Containerized with **Docker** and deployed on DigitalOcean **Kubernetes**

Chain Reaction

- Developed and deployed Chain Reaction, a 3D, 2 player game with AI agent implemented.
- · Used the Unity Game Engine to develop game environment, isolated AI agent implementation on separate server built using Java Spring Boot.
- Deployed on **UnityHub** and **Render**.

Notes

- Built and deployed Notes, a personal note-keeping companion.
- Used Django Rest Framework for backend, and NextJS for frontend, Supabase for database.
- Deployed on Vercel and Render.

EDUCATION

2022 - Present | Bangladesh University of Engineering and Technology

Bachelor of Science in Computer Science and Engineering

2019 - 2022 | Notre Dame College

Higher Secondary School Certificate

LANGUAGES

- Python
- Java
- C++
- Javascript

TECHNICAL SKILLS

- Node
- Django
- FastAPI
- Spring Boot
- NextJS
- Flutter
- Postgres
- Docker
- Kubernetes
- Microservices & **DevOps**
- Unity
- Machine Learning

ACHIEVEMENTS —

- Champion at API AVENGERS Microservice Hackathon under ETE Televerse 1.0, organized by CUET.
- Top 5 teams at IEEE VIP Cup 2025 among worldwide participants.
- Finalist at KUET Bitfest Datathon 2025 among countrywide participants

PUBLICATIONS -

- Collaborated on <u>paper</u> "Too Late to Train, Too Early To Use? A
 Study on Necessity and Viability of Low-Resource Bengali
 LLMs" (COLING 2025). Learning natural language processing.
- Worked on <u>paper</u> "Efficient Real-Time Video Colorization on Low-End CPUs via Pruning and Quantization". Learning computer vision.

LIBRARIES -

- Pytorch
- Tensorflow
- Pandas
- Numpy
- Transformers
- OpenCV
- vLLM