

EBNUL HASAN MAHI

vaibongo20@gmail.com | +880 1879 450 876 | Dhaka, Bangladesh

PROFESSIONAL SUMMARY

Software Engineering student at Daffodil International University with 3.79 CGPA and demonstrated expertise in full-stack web development. Experienced in designing and architecting complex systems, with strong proficiency in React, Node.js, Python, and Java. Group leader for multiple capstone projects, combining technical excellence with effective team management.

EDUCATION

Bachelor of Science in Software Engineering

Daffodil International University (DIU) | Expected Graduation: June 2028

Current CGPA: 3.79/4.00 | Spring 2026 Semester

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, HTML5, CSS3

Web Development: React.js, Node.js, Express.js, REST API, Material-UI, Vanilla JavaScript

Database & Backend: PostgreSQL, MongoDB, MySQL, Firebase, FastAPI, JWT Authentication

Core Competencies: System Design, Requirements Engineering, Object-Oriented Programming, API Design, Security, Docker, Git/GitHub, Agile

KEY PROJECTS

RoadPulse - Crowd-Sourced Traffic Monitoring Platform

Group Leader | Capstone Project | React.js, Node.js, Express, REST API, System Design | Summer 2026

Architected full-stack web application for real-time traffic data collection and visualization in urban Dhaka. Led requirements engineering and system architecture design; produced comprehensive Software Requirements Specification and block diagrams. Implemented responsive React frontend with interactive maps and real-time updates. Built RESTful API backend handling concurrent user requests and data aggregation.

Hospital Duty Roster - Full-Stack Scheduling Application

Python (FastAPI), React.js, TypeScript, PostgreSQL, Docker, JWT | Individual Project

Developed containerized full-stack application for automated hospital staff scheduling and leave management. Implemented role-based authentication using JWT with secure password hashing. Designed comprehensive database schema supporting complex scheduling logic.

Power-Pulse-Bd - Energy Management API and Dashboard

Node.js, Express, REST API, Chart.js, HTML5, CSS3 | Individual Project

Engineered RESTful API for real-time energy tracking and solar production metrics. Implemented modular service-oriented architecture. Developed interactive dashboard with Chart.js visualizations. Integrated automated API testing and deployed to Vercel.

Data Privacy Vault - Secure Java Application

Java, OOP, Encapsulation, HashMap, Data Encryption | Individual Project

Built secure Java application implementing Object-Oriented Programming principles and SOLID design patterns. Applied encryption mechanisms and secure data storage using HashMap. Demonstrated strong understanding of encapsulation and data privacy best practices.

Mini Solar Panel Monitor - Object-Oriented Java System

Java, OOP, Inheritance, Polymorphism, Abstraction, Exception Handling | Individual Project

Engineered object-oriented application simulating solar energy production monitoring. Implemented inheritance, polymorphism, and abstraction patterns for core functionality. Designed robust exception handling and data structure management using ArrayLists.

LEADERSHIP & ACHIEVEMENTS

Group Leader for Capstone and Coursework Projects: Led RoadPulse capstone from conception through delivery, managing team coordination, technical architecture, and requirement analysis

Consistent Academic Excellence: Maintained 3.79 CGPA with semester progression showing strong performance (Fall 2024: 3.5 → Spring 2026: 3.79)

System Design Expertise: Completed comprehensive system analysis and design capstone demonstrating full SDLC understanding with documentation, architecture design, and requirements analysis

LANGUAGES

Bengali (Native) | English (Fluent)