

Md. Tawhid Sultan

Software Engineer

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📍 Dhaka, Bangladesh

SUMMARY

Software Engineer with **5 years of experience** building and scaling backend systems for **FinTech and SaaS** products. Strong focus on **backend development, API design, and CI/CD pipelines**, with hands-on experience taking applications from **MVP to production**. Proven ability to improve system performance and reduce infrastructure costs through **database optimization**, resolving **N+1 query** issues, and effective **caching** strategies. Comfortable fine-tuning frontend layers when needed and collaborating across teams to deliver reliable, data-driven applications.

EXPERIENCE

Software Engineer

Embedded Logic Operations (ELO) 🌐

09/2020 – 03/2026

Remote, Bangladesh

- Leading different projects and teams (sizing 3 to 7 members).
- Started as an intern and earned promotion to Software Engineer.

PROJECTS

ELOBOOKS 🌐

Cloud-based Inventory Management SaaS

- Designed and developed **GraphQL APIs** with documentation.
- Integrated **websocket** to enable real-time notifications.
- Consumed and integrated **third-party APIs** (e.g., Payment gateways, different ERPs, existing applications, etc.)
- Analyzed the **ER Diagram** and designed the corresponding database architecture.
- Transformed **monolithic** architecture applications into a **microservice** architecture.
- **Deployed and maintained orchestration** of microservice production application.
- Optimized and implemented **query optimization, ACID** properties, and resolved **N+1** anomalies.
- Implemented customized **RBAC using Cloudsight**.

Recruitment Platform

Recruitment Assistance Application

- Built **RESTful API** services to support efficient frontend and backend communication.
- Developed a **data-driven** job matching system by analyzing user profiles.
- Introduced **event-driven architecture** to manage background processes and, depending on the corresponding action.

BagFlyers 🌐

Hand-carry PaaS

- Architected and developed RESTful APIs, alongside database design and management.

The NOORSTUDY 🌐

A comprehensive Islamic Education Program

- Built **full-stack** admin functionalities for course management.
- Ensured **multi-tenancy** and **data segregation** depending on tenant and RBAC.

EDUCATION

M.Sc in Computer Science

American International University-Bangladesh (AIUB)

05/2024 – 10/2025

B.Sc in Computer Science and Engineering

American International University-Bangladesh (AIUB)

05/2016 – 12/2020

SKILLS

Technical

- Languages: JavaScript, PHP, Python, C++
- Frameworks: NestJS, ExpressJS, Node.js, Laravel, Django
- Databases: MongoDB, MySQL, PostgreSQL, MSSQL, Redis
- IDEs & Editors: VS Code
- Version Control: Git
- Development Tools: Docker, Postman, Swagger, Power BI
- AI Tools: Antigravity, Cursor, ChatGPT, Claude
- Testing: Unit

Soft Skills

- Team Work, Communication, Requirement Analysis, Sprint Planning, Sprint Retrospective, Problem Solving, Data-Driven Decision Making

Non - Technical

- Project Management: ClickUp, Jira, Plane, Linear
- Communication: Teams, Discord
- Design & Prototyping: Draw.io
- Methodologies: Agile, Waterfall, TDD
- Operating Systems: Windows, Linux
- Software & Services: Office 365
- Languages: English, Bengali, Hindi

PUBLICATIONS

A Microclimate based Crop Recommender System for Precision Agriculture [↗](#)

DOI: [10.5120/ijca2021921309](https://doi.org/10.5120/ijca2021921309)

Proposes a microclimate-based crop recommender for precision agriculture that combines IoT sensors and machine learning to guide farmers toward the best crop for their local conditions. Real-time temperature, humidity, and rainfall are collected via an Arduino-based device and sent to a cloud server, where trained regression models use historical Bangladesh crop and weather data to predict expected production. The results are delivered through a Django web app, aiming to reduce crop-selection risk, save time and cost, and make data-driven farming decisions more practical in real-world settings.

REFERENCES

Fauzul Chowdhury, *Chief Information Officer*, Embedded Logic Operations
fauzul@elobyte.com

Mohammad Wadud Rahman, *Chief Technology Officer*, AutomateSphere
contact@wadudrahman.com