Md. Mahbubur Rahman

Dhaka, Bangladesh | +8801744177620 | mrahman221441@gmail.com
LinkedIn: **linkedin.com/in/maahhbuub** | GitHub: **github.com/maahhbuub**

Education

BSc in Computer Science and Engineering 2022 – 2026
United International University Dhaka, Bangladesh
CGPA: **3.54/4.00**

Technical Skills

Languages: C, C++, Python, JavaScript, PHP
Frontend: React, React Native, HTML, CSS, Tailwind CSS
Backend: Node.js, Express.js
Databases: MySQL, PostgreSQL, MongoDB, Redis
ORM & ODM: Prisma, Mongoose
Tools: Git, GitHub, Docker, Postman
Concepts: Data Structures & Algorithms, REST APIs, OOP

Projects

Zippify — A URL Shortener **Code** – Backend | Frontend | Live
Tech Stack: React, Node.js, Express.js, JavaScript, PostgreSQL, Prisma, Redis

- Architected a scalable URL shortener using Base62 encoding with collision-safe ID generation, custom aliases, per-user deduplication, expiration support, and a full CRUD dashboard.
- Implemented a Redis cache-aside strategy for redirects, reducing latency by 39% (286ms → 176ms, cache miss vs. hit) and sustaining ∼290 req/s at p99 187ms with zero errors under 20 concurrent connections in production load tests (autocannon)
- Built JWT authentication (access/refresh tokens, bcrypt, email verification via Resend, password reset) with independently revocable multi-device sessions.
- Implemented Redis-backed distributed rate limiting, keyed by IP and by email where relevant, on link creation, login, signup, email resend, and password reset.
- Deployed the frontend (Vercel) and backend (Render) as independent services, using edge rewrites to unify routing and resolving production CORS and route/short-code collision issues.

Wanderlust — Full-Stack Property Rental Platform **Code** – GitHub | Live
Tech Stack: Node.js, Express.js, MongoDB, Cloudinary, Bootstrap

- Built Wanderlust, full-stack listings app with REST APIs, session auth (Passport), server validation and error handling.
- Integrated Cloudinary image uploads + Mapbox geocoding, stored listings as GeoJSON and served resized previews.
- Added production features: connect-mongo session store, route ownership checks, cascading review deletion, and DB seed script for demos.

DirectEdge — Agricultural Supply Chain Management System **Code** – GitHub
Tech Stack: Python, PHP, JavaScript, MySQL, Tailwind

- Developed a multi-role e-commerce and warehouse platform powering agent/shop-owner/warehouse workflows.
- Integrated hosted payment and IPN checkout flow (SslCommerz) to enable reliable order transactions.
- Developed demand-forecasting prototype in Python and connected analytics into the shop-owner dashboard to inform inventory decisions.
- Implemented secure farmer onboarding, profile management and transactional DB logic with server-side validation and file uploads.

Achievements

- **First Runner-Up** at the UIU CSE Project Show (Summer 2025) for the project "DirectEdge".
- **9th Runner-Up** in UIU Coders Combat 5.0
- Academic Scholarship Recipient.

Competitive Programming

- Participated in inter-university contests including **UIU IUPC**, **UIU Coders Combat 4.0** and **5.0**.
- Solved 335+ problems on **Codeforces** and Participated in 40+ contests on **Codeforces** and **VJudge**,

Experience

Personal Projects & Self-Driven Development

- Built and deployed multiple full-stack applications, following clean code practices, version control, and scalable system design principles.