

M D TOWFIQUL ISLAM RATUL

Junior Web Developer | Full-Stack Developer

Dhaka, Bangladesh | Portfolio: mdtowfigulislamratul.online

Email: sara_pa@mdtowfigulislamratul.online | Phone: +880 1632-209017

GitHub: github.com/ratulislamra-ai | LinkedIn: [towfigul-islam-ratul-tir](https://www.linkedin.com/in/towfigul-islam-ratul-tir)



PROFESSIONAL SUMMARY

Versatile Full-Stack Developer with hands-on experience designing, developing, and deploying business applications, interactive dashboards, automation engines, and modern web platforms. Proficient across modern frontend frameworks (React 19, Next.js, Tailwind CSS), backend technologies (Node.js, Python AsyncIO), database persistence layers (SQLite, PostgreSQL, custom atomic datastores), REST APIs, and containerized DevOps workflows (Docker, Docker Compose, Traefik). Demonstrated track record of delivering production-grade web systems hosted on Linux VPS environments.

TECHNICAL SKILLS

Frontend:	React.js (React 19), Next.js (App Router), TypeScript, JavaScript (ES6+), HTML5, CSS3, Tailwind CSS v4, Glassmorphism UI Systems, Progressive Web Apps (PWA Manifest)
Backend:	Node.js (Native HTTP & Express APIs), Python 3 (AsyncIO, BeautifulSoup4, File I/O, Regex Data Pipelines), RESTful API Design
Databases:	SQLite, PostgreSQL (DDL & Schema Migration Engines), Custom Atomic Write-Rename JSON DataStores
DevOps & VPS:	Docker, Docker Compose, Linux VPS (Ubuntu Administration), Traefik Reverse Proxy, Let's Encrypt TLS/SSL, Git
Tools & Other:	Vite 8, Oxlint, npm, PowerShell, IMAP Protocol Integration, System Automation Scripts

FEATURED PROJECT EXPERIENCE

Outreach Intelligence & Automated Reply Classifier System

Technologies: React, Next.js (App Router), TypeScript, Python 3, AsyncIO, SQLite, PostgreSQL, Docker, Traefik

- Developed a 1,100+ line React/Next.js response management dashboard supporting multi-campaign inbox aggregation, classification filters (Positive, Interested, Out of Office, Unsubscribe), and follow-up state tracking.
- Engineered asynchronous Python background workers for real-time IMAP inbox synchronization and NLP regex reply classification.
- Containerized microservices using Docker Compose and deployed behind Traefik reverse proxy on Linux VPS with automated TLS encryption.

Warehouse & Logistics Management Platform | <https://warehouse.mdtowfigulislamratul.online>

Technologies: Node.js, JavaScript ES6+, HTML5, CSS3, Docker, Traefik SSL

- Engineered a custom Node.js HTTP server utilizing an atomic write-and-rename JSON database engine (DataStore) to eliminate filesystem corruption.
- Implemented security rate-limiting mechanisms to enforce a 15-minute IP lockout after repeated failed login attempts.
- Designed a responsive dark glassmorphism user interface and containerized the system with Docker Compose for live production deployment behind Traefik.

MaxPro Wireless Headphones E-Commerce Web App

Technologies: React 19, Vite 8, Tailwind CSS v4, Lucide React, Oxlint

- Built interactive product showcase components highlighting Active Noise Cancellation (ANC), Gaming, and Sport models with high-definition artwork.
- Integrated React 19 component architecture bundled with Vite 8 for instant HMR and optimized static production builds.
- Designed a custom dark aesthetic using Tailwind CSS v4 with responsive layouts across mobile, tablet, and desktop screens.

Autonomous E-Drive File Organizer & Classifier System

Technologies: Python 3, Tkinter GUI, File System I/O, SHA-256/MD5, Python unittest

- Programmed core Python file scanning algorithms to organize unsorted files into structured Year/Month folder hierarchies.
- Implemented checksum-based MD5 duplicate detection and dry-run simulation mode to prevent unintended data loss.
- Wrote automated unit test suites (tests/) ensuring reliable execution across complex directory structures.

DIU Class Routine & Schedule Management PWA

Technologies: HTML5, CSS3, Vanilla JavaScript ES6, Web App Manifest

- Developed client-side search algorithms allowing instant filtering by course title, instructor name, and room number.
- Configured Web App Manifest and PWA standalone display properties tailored for Department of Innovation & Entrepreneurship.

EDUCATION

Department of Innovation & Entrepreneurship | Daffodil International University (DIU)

Dhaka, Bangladesh

ADDITIONAL RELEVANT EXPERIENCE

- **Personal & Open Source Engineering:** Developed document intelligence pipelines (KYC verification parser) and vector rendering tools (Genelion Vector Engine).
- **Linux VPS System Administration:** Deployed and maintained production services using Docker Compose, Traefik ingress routing, and systemd process management.