

# Md. Navidul Hoque

Dhaka, Bangladesh | +8801700763325 | [hnavidul@gmail.com](mailto:hnavidul@gmail.com)

[LinkedIn](#) | [GitHub](#)



## Summary

Highly motivated and detail-oriented Backend Developer with more than 1 year of hands-on experience in building scalable, secure backend systems using **Node.js** and **NestJS**. Proficient in database design (**PostgreSQL**, **MySQL**), API development, and **event driven architecture**. Passionate about integrating AI models to build intelligent applications and skilled in writing clean, maintainable code.

## Technical Skills (Hard Skills)

- **Languages:** TypeScript, JavaScript
- **Backend Frameworks:** Node.js, Express.js, NestJS
- **Architecture & Patterns:** Microservices, REST APIs, Event-Driven Architecture
- **Databases & ORMs:** PostgreSQL, MySQL, MongoDB, Prisma ORM, Mongoose, PhpMyAdmin
- **Messaging & Queues:** Redis, BullMQ, Apache Kafka, WebSockets, Cron Jobs
- **DevOps & Cloud:** Docker, Cloudinary
- **Security & Authentication:** JWT, OAuth2, Role-Based Access Control (RBAC), Rate Limiting
- **Payments & Integrations:** Stripe Connect, OpenAI
- **Version Control & Tools:** Git, GitHub, Postman, Visual Studio Code

## Soft Skills

- Problem-Solving and Analytical Thinking
- Adaptability and Continuous Learning
- Team Collaboration and Communication
- Time Management and Task Prioritization

## Projects

### Doctor Appointment Booking System

**Stack:** NestJS, TypeScript, PostgreSQL, Prisma ORM, Redis, BullMQ, Apache Kafka, WebSocket, Stripe Connect, Docker, Cloudinary, Cron Jobs, JWT, REST API, OpenAI

#### [Github Repository](#)

- Built a real-time chat and notification system using **WebSocket**, **Redis**, and **BullMQ**, handling 1,000+ concurrent users.
- Architected an asynchronous data processing system using **Apache Kafka**, efficiently handling 10000+ daily events.
- Automated appointment updates, background jobs, and activity tracking with **BullMQ** and **Cron Jobs**, reducing manual effort by 30%.
- Integrated **Stripe Connect** for secure multi-vendor payments, enabling instant payouts to 50+ doctors.
- Optimized performance with **Redis caching** and **rate limiting**, reducing API response time by 60%.
- Increased user engagement with email/SMS notifications, boosting response rates by 25%.
- Containerized with **Docker**, ensuring consistent environments with **Redis**, **PostgreSQL**, and **Kafka**.
- Integrated **OpenAI** via **MCP server** to power AI-driven chat assistance, appointment recommendations, and automated responses.

## AI-Powered Document Assistant System

**Stack:** NestJS, TypeScript, PostgreSQL, Prisma ORM, JWT, Docker, OpenAI, Cloudinary, REST API

[GitHub Repository](#)

- Developed AI-powered document processing backend using **NestJS**, enabling intelligent document management and retrieval.
- Integrated **OpenAI** to generate summaries and insights from uploaded documents, improving information extraction efficiency.
- Built a file upload and storage system using **Cloudinary**, supporting images, PDFs, and videos in a unified workflow.
- Containerized **PostgreSQL** with **Docker**, maintaining consistent development and deployment environments.
- Applied logging and error monitoring with **NestJS** Logger for improved debugging and system reliability.

## Experience

### Backend Software Engineer, BdCalling IT Ltd

Dhaka, Bangladesh | Dec 2024 – Jun 2025

- Engineered robust authentication and authorization systems using **JWT** and **OAuth2** (Google, Facebook).
- Designed and optimized high-performance **REST APIs** for production, achieving 99.9% uptime.
- Enhanced backend services, improving performance of internal tools and increasing operational efficiency.
- Improved system maintainability and scalability by applying clean architecture principles.

## Education

**B.Sc. in Computer Science & Engineering — Military Institute of Science and Technology (MIST),**  
2020–2024

**HSC — Dhaka Residential Model College,** 2017–2019

**SSC — Dhaka Residential Model College,** 2015–2017

## References

### Muhammad Mozzammel Haque

Arogga Limited, Senior Software Engineer

+8801674831500 | [mozzammelui@gmail.com](mailto:mozzammelui@gmail.com)

### Mohammad Raki Billah

Hi-Tech Bangla, Senior Manager (Software Development)

+8801315050369 | [raki.pmo.bulipe@gmail.com](mailto:raki.pmo.bulipe@gmail.com)