MD Minjurul Haque

PERSONAL DETAILS

Location	Dhaka, Bangladesh
Phone	(+880) 1799305582
Mail	m.minjurulhaque@gmail.com
Linkedin	https://www.linkedin.com/in/minjurulrahman/
Github	https://github.com/dev-frog

PROFILE

Senior Backend Engineer with **5+ years** of experience building scalable backend systems using **Node.js** and **TypeScript**. Experienced in designing microservices, distributed systems, REST/GraphQL APIs, and event-driven architectures. Strong background in backend performance optimization, cloud-native development, and building reliable production systems on AWS.

EDUCATION

Bachelor of Computer Science (2016 – 2021)
United College of Aviation Science and Management
Specialization in Software Engineering, Data Structures, and Database Systems.

Masters in Applied Statistics and Data Science (2023 – 2025)
Jahangirnagar University
Part-time; focusing on regression analysis and time-series forecasting applied to system performance monitoring.

WORK EXPERIENCE

Senior Full-Stack Developer (2024 – 2025)
NeovoTech Limited – Dhaka, Bangladesh

- Architected and implemented a microservices platform using NestJS and RabbitMQ, improving system modularity, scalability, and operational maintainability.
- Led the redesign of the authentication and authorization infrastructure using OAuth 2.0 and RSA-based security mechanisms.
- Designed caching and data-access optimization strategies using Redis and PostgreSQL, reducing API response times from 450ms to **180ms**.
- Provided technical leadership through code reviews, architecture discussions, and mentoring of junior engineers.
- Established CI/CD workflows with GitHub Actions and Jenkins, improving deployment reliability and streamlining software delivery.

Back-End Developer (2022 – 2024)

Padelmates – Sweden (Remote)

- Led the re-architecture of a monolithic Node.js application into event-driven microservices using RabbitMQ, enabling independent deployments, improved fault isolation, and better maintainability.
- Implemented centralized error handling, structured logging, and distributed tracing using the ELK stack, enhancing observability and accelerating issue diagnosis.
- Optimized PostgreSQL queries and introduced connection pooling to improve database performance and resource utilization.
- Established code quality standards using SonarQube, automated testing with Jest, and CI-based quality gates to improve code reliability and maintainability.
- Collaborated with mobile and frontend teams to design and implement a GraphQL federation layer, simplifying data access and improving API efficiency.

Back-End Developer (2021 – 2022)

Eucaps Limited – Sweden (Remote)

- Designed a serverless data pipeline using AWS Lambda and SQS to process large IPO datasets with reliable asynchronous processing and scalable execution.
- Built a high-frequency web crawler and GraphQL API using AWS Amplify to deliver real-time market intelligence and structured financial data.
- Developed and maintained backend services using Node.js, TypeScript, and PostgreSQL, focusing on API reliability, performance, and clean architecture.
- Implemented data processing workflows, API integrations, and database optimization strategies to improve application performance and maintainability.
- Collaborated with frontend and product teams to design API contracts, troubleshoot production issues, and deliver new backend features.

SKILLS

Backend Architecture: Node.js, TypeScript, NestJS, Express, GraphQL, REST APIs, WebSockets (Socket.IO), Microservices, Event-Driven Design

Data & Messaging: PostgreSQL, MongoDB, DynamoDB, Redis (Caching/Sessions), RabbitMQ, AWS SQS

Infrastructure & DevOps: AWS (EC2, Lambda, Amplify, S3), Docker, Kubernetes (kubectl), NGINX, CI/CD (GitHub Actions), ELK Stack,

Testing & Quality: Jest, Mocha, Cypress, TDD, Integration Testing, Static Code Analysis

Other: Python (Scripting), Linux (Ubuntu/Arch), Bash

CONFERENCE / AWARDS

Cyber Security Challenge 2018

ICT Division, Bangladesh

National-level cybersecurity competition involving 200+ university teams. Competed in live attack-defense rounds, cryptography challenges, and digital forensics. Demonstrated skills in vulnerability assessment, privilege escalation, and real-time threat mitigation. **Awarded First Runner-Up (2nd Place)** nationally.

National CANSAT Competition 2019

BRAC University, Bangladesh

One of 8 teams selected nationally to design a satellite simulation fitting within a soda can (CANSAT). Built a functional prototype with onboard sensors (temperature, pressure, humidity) and telemetry transmission. Successfully tested flight dynamics and data recovery. Competition focused on aerospace engineering, embedded systems, and real-time data logging.

Smart Garden Watering and Lighting System 2020

United College of Aviation Science and Management, Bangladesh

Designed and built a fully automated IoT-based gardening system using soil moisture sensors and photoresistors to autonomously regulate watering and LED lighting. Recognized as the top project among 50+ teams for practical application of embedded systems and sensor integration.

KEY PROJECTS

FrogJS — Custom JavaScript Runtime 2025

Open Source (GitHub: dev-frog/frogJs)

- Built a lightweight JavaScript runtime from scratch using **V8 engine** and **libuv**, supporting server-side JavaScript execution with event-driven, non-blocking I/O.
- Implemented **CommonJS module system** with 'require()' caching, relative path resolution, and circular dependency handling.
- Designed and built **TCP networking**, **file system operations** (sync/async), and **timer APIs** (setTimeout, setInterval).
- Wrote the core in **C++17** with a minimal, clean architecture separating runtime, binding, and module loading concerns.
- Achieved **compatibility with Node.js-style APIs**, demonstrating deep understanding of JavaScript internals and systems programming.