Rafeul Anam Udoy

Full Stack Developer
Konapara, Demra, Dhaka-1362 | udoyrafeul@gmail.com | +880 1515-635005
LinkedIn | GitHub | Portfolio

Professional Experience

SM Technology Dhaka, Bangladesh
Full Stack Developer *Nov 2024 – Present*

- Engineered 5+ applications for international clients across healthcare, matrimonial, sports, and service industries — spanning full delivery to production and advanced-stage development
- Designed and built scalable RESTful APIs using Node.js and Express.js with Mongoose and Prisma ORM on MongoDB and PostgreSQL.
- Integrated multiple payment gateways (Stripe, PayPal, Razorpay) with webhook handling, subscription lifecycle, and access control logic.
- Built real-time systems including live chat (Socket.io), live event notifications (WebSocket, SSE), and in-app video conferencing (Zoom SDK).
- Built a two-way WhatsApp communication system using WhatsApp Business API and webhooks – enabling admins to send, receive, and manage real-time conversations with clients directly from the platform dashboard.
- Integrated OpenAI API for AI-driven features; implemented ML-based face verification using face-api.js and TensorFlow.js.
- Managed background job processing using BullMQ and Redis; owned full VPS deployment pipeline with Nginx, PM2, SSL, and firewall configuration.
- Applied MVC architecture and clean code practices in an Agile team of 3–4 using Git and GitHub.

Technical Skills

Languages: JavaScript (ES6+), TypeScript
Backend: Node.js, Express.js, REST API Design, JWT, Argon2, OAuth 2.0, Zod, Yup, BullMQ, Socket.io, WebSocket, SSE
Databases: MongoDB, Mongoose, PostgreSQL, Prisma ORM, Redis
Payment & APIs: Stripe, PayPal, Razorpay, OpenAI API, WhatsApp Business API, Zoom SDK, Nodemailer, Brevo, Cloudinary, Firebase Admin, AWS S3
AI & ML: face-api.js, TensorFlow.js
Frontend: React.js, Next.js, Redux Toolkit, TailwindCSS, Bootstrap, React Hook Form
DevOps: Docker, Nginx, PM2, VPS (DigitalOcean, Hostinger), SSL/TLS, SSH, Firewall Configuration
Tools: Git, GitHub, Postman, VS Code, Figma

Key Projects

Keep It Halal – Matrimonial Platform Live Link

Node.js, TypeScript, Express.js, MongoDB, Prisma, Stripe, WebSocket, BullMQ, Redis, face-api.js, AWS S3, Firebase

- Built a geo-based matchmaking engine with location-first ranking, eligibility filtering, and a weighted compatibility score across sect, age, hobbies, and lifestyle preferences with boost and vetting badge-aware prioritisation.
- Designed a female-only tiered visibility system where a user's subscription plan and usage history dynamically control which vetting tier of male profiles she can be matched with.
- Engineered a subscription system with plan-based feature access gating, gender-specific billing flows, like and skip quota enforcement, and one-time purchase credit support.
- Implemented automated face and identity verification using face-api.js and TensorFlow.js for ML-based photo validation during user onboarding.
- Integrated Zoom OAuth for meeting provisioning to support human-panel vetting and specialist-led coaching sessions with full schedule and notification management.

- Developed real-time private chat over WebSocket, async job queues with BullMQ, Firebase push notifications, and AWS S3 for media storage.

Doctor Appointment – Healthcare Marketplace Live Link

Node.js, TypeScript, Express.js, MongoDB, Prisma, Stripe, Redis, BullMQ, OpenAI API, AWS S3

- Built a multi-role healthcare marketplace connecting patients with doctors, clinics, hospitals, labs, and pharmacies – supporting provider onboarding, appointment booking, and admin operations.
- Integrated OpenAI API to translate natural-language patient queries into structured medical search results mapped to specialties, service categories, and provider keywords.
- Engineered Stripe recurring subscriptions and Stripe Connect for provider payouts with feature flag gating and usage quota tracking per subscription plan.
- Built authentication with OTP email via BullMQ queues, Redis-backed sessions, JWT, and Argon2 hashing; enforced role-based access across Patient, Provider, Admin, and Super Admin roles.
- Implemented provider onboarding with profile, services, weekly schedule, and slot-based availability; patients can search, book, pay, and submit reviews.

AnesthesiaLink – Specialized Job Portal Live Link

Node.js, Express.js, MongoDB, TypeScript, Prisma, JWT, Argon2

- Developed a niche job portal tailored for anesthesia professionals, streamlining the recruitment process with specialized search and filtering.
- Implemented secure authentication and role-based access control for job seekers and employers using JWT and Argon2.
- Engineered a robust backend architecture to handle job postings, application tracking, and real-time status updates.

Education

City University Dhaka, Bangladesh
B.Sc. in Computer Science & Engineering *Dec 2016 – Jan 2022*

Continuous Learning

Exploring system design and scalability concepts | Practising DSA & problem solving on LeetCode