MD. NAYEEM AHMED

Backend Developer, Java and Spring Boot

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Summary

Backend developer shipping on both **reactive** (Spring WebFlux, Reactor, Neo4j, Kafka) and **servlet** (Spring MVC, JPA, PostgreSQL) stacks: chat, messaging and auth on a production WebFlux platform at work, and four end-to-end products of my own (RAG, payments, a courier ledger, a PWA).

Experience

Junior Backend Developer (Java) — Dhrubok Infotech Services Limited, Dhaka Jan 2026 – Present

- **TaskATask** (task management, Spring WebFlux + Neo4j): built the real-time **chat system** on **WebFlux Sinks** — group conversations, pin/archive/mute, scheduled and self-destructing messages; message bodies encrypted at the persistence layer with **Jasypt**.
- Built a bulk contact-import pipeline for up to **10,000 records** on **Redis**-backed job queues with chunked processing and batched duplicate-detection queries.
- Designed the appointment accept/reject/reschedule flow with **Kafka**-driven notifications, synced to **Google Calendar** and iCalendar; implemented **OAuth2** sign-in with Google, Facebook, Apple and email/phone OTP.
- Found and fixed a **Neo4j** bug where every node save re-fetched all relationships: projection-based updates for scalar fields and custom **Cypher** for relationship changes.
- **Hospitalia** (doctor appointment booking): built booking, schedule lookup and cancellation workflows that removed double-booking between doctors and patients.

Backend Developer (Java) Intern — Dhrubok Infotech Services Limited, Dhaka Oct 2025 – Dec 2025

- Implemented full-text search with **Hibernate Search** on a **Lucene** backend, with custom analyzers.

Projects

AgroTrends — knowledge-sharing platform for agriculture with an AI advisor that cites its sources Backend | Frontend

Java 21, Spring Boot 3.5, Spring AI (Gemini), PostgreSQL + pgvector, Docker, Caddy; React 19, TypeScript, TanStack Query

- Built **RAG** over the platform's own posts: chunked embeddings in **pgvector** with metadata filters, a retrieval advisor (top 5, similarity ≥ 0.7) and answers returned with the **cited posts**; per-user daily quota, 60 s model timeout.
- Hardened authentication: 15-minute JWTs checked against a stored session, rotating single-use refresh tokens, owner-or-admin checks in the service layer, rate-limited sign-in.
- Shipped a Medium-style React app (feeds, claps, bookmarks, Q&A, Bangla/English) in 130+ small PRs; Docker Compose deploy, nightly pg_dump backups.

Senpai Supply — online store for anime merchandise in Bangladesh Backend | Frontend

Java 21, Spring Boot 3.5, PostgreSQL, Flyway, Spring Security + JWT; React 19, TypeScript, Playwright

- Modular monolith of 9 Maven modules that talk only through API interfaces and events; orders move only through a state machine; totals computed server-side.
- Put COD, **bKash** and **SSLCommerz** behind one PaymentProvider interface selected by config; checkout is safe to retry with an **Idempotency-Key**; order e-mails go through a **transactional outbox**.

AveryDay — habit tracker for self-learners, installable as a PWA Live | Backend | Frontend

Java 21, Spring Boot 4, Spring MVC, JPA, PostgreSQL, Flyway, Testcontainers; React, TypeScript; Render + Vercel

- Streaks, XP and goal progress computed on read (rest days with a weekly limit), web-push reminders, Google sign-in verified locally against Google's keys, refresh-token reuse detection, an admin API; 110+ PRs.

Courier Backend — parcel delivery with cash on delivery and merchant payouts Backend

Java 21, Spring Boot, Spring MVC, JPA, PostgreSQL, Flyway, multi-module Maven

- Modelled the parcel lifecycle as a state machine with status history and @Version optimistic locking; hubs, riders, pickups and pricing as separate modules.
- Built a COD ledger fed by parcel domain events, plus merchant payout requests with admin approval, tested against concurrent requests and approve-vs-reject races.

Skills

Languages: Java, SQL, Cypher, TypeScript, JavaScript, Python
Backend: Spring Boot, Spring WebFlux, Project Reactor, Spring MVC, Spring Security, Hibernate, Spring Data Neo4j, Spring AI
Data and messaging: PostgreSQL, pgvector, Neo4j, MySQL, Redis, Apache Kafka, Flyway, Lucene
Testing: JUnit 5, Mockito, Testcontainers, Playwright **Tools:** Maven, Docker, GitHub Actions, Git, Linux, React

Education

B.Sc. in Computer Science and Engineering, Green University of Bangladesh — CGPA 3.32 Feb 2022 – Feb 2026