

Satya Ranjan DebSharma

Software Engineer · Backend and Full-Stack

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SUMMARY

Software engineer focused on TypeScript backends and full-stack applications. Project work spans inventory transactions, PostgreSQL reporting, background jobs, authentication, and event-driven field-service workflows.

EXPERIENCE

Software Engineer — Techsfera <i>Dhaka, Bangladesh · NestJS, PostgreSQL, Prisma, Redis, BullMQ, Next.js, React, Flutter, Docker</i> - VegMove's NestJS backend connects grocery ordering, warehouse operations and delivery through PostgreSQL and Prisma, with Redis messaging and Next.js and Flutter clients. - Inventory movements use transaction-scoped row locks, idempotency checks before and after locking, and sorted lock acquisition for shelf transfers. Return-location rules validate warehouse and cabinet eligibility. - Reporting uses PostgreSQL CTEs, window functions and lateral joins for operational analytics, with filtering and aggregation in SQL and customer cohort drill-downs. - BullMQ workers handle order follow-up tasks, delivery-delay alerts and scheduled notifications. Entity-derived job IDs and persisted notification schedules support repeatable background processing. - Authentication includes TOTP with encrypted secrets, Redis-backed attempt controls and CAPTCHA checks. Customer phone access uses expiring grants with server-side authorization. - Other company code includes Rogo Portal's typed admissions workflows and SQL payment-dues calculations, plus Nearu's Next.js moderation screens for users, posts and subscription plans.	March 2025 – Present
Frontend Developer — FullStack App Crafters <i>Rajshahi, Bangladesh · React, Next.js, TypeScript, Tailwind CSS, Redux Toolkit, RTK Query, Zustand</i> - Built responsive React and Next.js applications in TypeScript, using component-level code splitting and lazy loading. - Used Redux Toolkit and Zustand for application state and shared components; integrated REST APIs with RTK Query in collaboration with backend developers.	March 2024 – February 2025

TECHNICAL SKILLS

- Languages:** TypeScript, JavaScript, SQL, Dart, HTML, CSS
- Backend:** Node.js, NestJS, REST APIs, tRPC, Zod, BullMQ, RabbitMQ, Redis pub/sub, Server-Sent Events
- Databases:** PostgreSQL, MySQL, Prisma, Drizzle, Redis, transactions, row locking, SQL CTEs
- Frontend and mobile:** React, Next.js, React Native, Flutter, Redux Toolkit, RTK Query, TanStack Query, Tailwind CSS
- Infrastructure:** Docker, Compose; Kubernetes, Kustomize and Terraform definitions (FieldForge)
- Testing and tooling:** Jest, Cypress, Playwright, Flutter tests, Turborepo, pnpm workspaces, ESLint

PROJECTS

VegMove - grocery ordering, warehouse and delivery platform <i>NestJS, PostgreSQL, Prisma, Redis, BullMQ, Next.js, TanStack Query, Flutter, Cypress</i> - Grocery workflows connect customer ordering, shelf picking, packing and delivery. A NestJS and PostgreSQL backend serves Next.js storefront and admin interfaces alongside Flutter applications. - The Next.js storefront uses optimistic cart updates with rollback on failure, checkout and refund/exchange flows. English and Bengali localization and Cypress browser tests are present in the code. - Admin interfaces share date-range, filter and column-visibility utilities. Flutter warehouse screens integrate shelf-location selection and inventory APIs; order updates stream through Redis-backed SSE.	2025 – Present
FieldForge — field service marketplace (personal project, in progress) <i>NestJS, MySQL, Drizzle, Redis, RabbitMQ, Next.js, React Native, Docker, Turborepo</i> - NestJS services implement work-order transitions, geofenced check-in and technician ranking over MySQL, Drizzle and Redis. RabbitMQ consumers include duplicate checks, bounded retries and dead-letter routing. - Billing uses row locks, idempotency records and invoice generation. Next.js and React Native clients are in progress; payments and notifications are simulated, and some client views use sample data.	2026

EDUCATION

Uttara University — B.Sc. in Computer Science and Engineering	January 2026 – Present
Rangpur Polytechnic Institute — Diploma in Computer Technology	June 2020 – January 2025