

ATUL SINGH

Software Engineer | Full-Stack Developer | React · Node.js · Express.js · PostgreSQL · MongoDB
atulsingh05540@gmail.com | +91 63924 26010 | [LinkedIn](#) | [GitHub](#) | [Portfolio](#) | [LeetCode](#)

PROFESSIONAL SUMMARY

B.Tech Computer Science student (Expected 2027) with hands-on experience building full-stack web applications using React, TypeScript, JavaScript, Node.js, Express.js, PostgreSQL, and MongoDB. Developed REST APIs, authentication, and database-driven applications, with a strong foundation in DSA, OOP, DBMS, Operating Systems, and Computer Networks.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python, Java, C
Backend: Node.js, Express.js, REST APIs, JWT Authentication, Zod
Frontend: React, HTML, CSS, Tailwind CSS, Vite
Databases: SQL, PostgreSQL, MongoDB, Prisma, Mongoose
CS Fundamentals: DSA, OOP, Operating Systems, DBMS, Computer Networks
Tools & Platforms: Git, GitHub, GitHub Actions, Vercel, Render, Postman
Concepts: WebSockets, CI/CD, PWA, Web Speech API, Electron, Leaflet

PROJECTS

StockFlow ERP — Inventory, Sales & CRM Operations Portal

[GitHub](#) · [Live Demo](#)

React · TypeScript · Node.js · Express.js · PostgreSQL · Prisma · Zod · JWT · Tailwind CSS

- Built a layered Express.js and TypeScript backend — routes, controllers, and services — exposing REST APIs for customers, products, stock movements, and sales challans, using Prisma to model the PostgreSQL database.
- Implemented JWT authentication and role-based authorization for Admin, Sales, Warehouse, and Accounts roles, and validated all write-endpoint payloads with Zod.
- Designed inventory logic that blocks challan confirmation on insufficient stock, prevents negative inventory, and logs every stock movement (product, quantity, reason, user, timestamp) for audit tracking.
- Configured a GitHub Actions CI/CD pipeline to lint, type-check, and build the frontend and backend on every push, with the React frontend deployed on Vercel and the Express backend deployed on Render.

DigitalRX — Clinic Management & WhatsApp Prescription System

[GitHub](#) · [Live Demo](#)

React · JavaScript · Vite · PWA · Web Speech API · Node.js · Express.js · WebSockets · Electron

- Built an offline-first PWA for clinic management — patient registration, digital consultations with Web Speech API voice-to-text, and prescription generation — using React and Vite, with all data persisted locally for uninterrupted offline use.
- Developed a Node.js and Express REST service integrating a WebSocket-based WhatsApp client for QR device linking, session recovery, and direct prescription PDF delivery to patients.
- Implemented medicine search and autocomplete over a local drug dataset with name, strength, and dosage autofill, and packaged the application as a Windows desktop app using Electron.

TripSmart — Budget-Aware Trip Planning Platform

[GitHub](#) · [Live Demo](#)

React · TypeScript · Node.js · Express.js · MongoDB · Mongoose · JWT · Leaflet

- Built a full-stack trip planning platform that converts origin, destination, dates, and budget into Budget, Comfort, and Premium itineraries across transport, accommodation, activities, and meals.
- Implemented JWT-authenticated REST APIs on Express with Mongoose models for users and saved trips, along with city, flight, train, and hotel search endpoints backed by MongoDB.
- Integrated Leaflet for interactive map rendering, plotting origin, destination, and stop markers with route and distance overlays for each generated itinerary.

EDUCATION

B.Tech, Computer Science & Engineering — Parul University, Vadodara, Gujarat 2023 – 2027 (Expected)

ACHIEVEMENTS & CODING PROFILE

- **Guidewire Dev Trails 2026** — [KavachPay](#): Contributed to a secure digital payments and work-proof protocol for parametric insurance, built with TypeScript and React. [Live Demo](#) · [GitHub](#)
- **Smart India Hackathon 2024**: Selected through the Vadodara regional round for India's largest student hackathon; built an autonomous tactical drone system.
- **XR Creator Hackathon, WAVES 2025 (Ministry of I&B)**: Cleared Round 1 of a national-level XR hackathon organized by the Ministry of Information & Broadcasting.
- **Vadodara Hackathon 5.0, 2024** — **Parul University**: Presented civic technology and smart city solutions at an institutional-level hackathon.
- **Problem Solving**: 200+ problems solved on [LeetCode](#) (Arrays, Strings, Trees); active on [CodeChef](#) and [HackerRank](#).
- **Certification**: [SQL \(Basic\)](#) — HackerRank, earned May 2026.