Saransh

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SUMMARY

Backend developer building REST APIs in TypeScript and Node.js, with production experience in PostgreSQL schema design, Redis caching, queue-based processing and Git-based team workflows.

SKILLS

- **Backend**: Node.js, Express, NestJS, REST API design, GraphQL, Socket.io, BullMQ, FastAPI, JWT auth
- **Databases**: PostgreSQL, MySQL, MongoDB, Redis — schema design, indexing, query optimization, caching
- **Languages**: TypeScript, JavaScript, C++, Python, Go
- **Tools & DevOps**: Git, Docker, CI/CD pipelines, Bash / Linux shell, Postman, Vercel, Render, automated tests, AWS
- **Frontend (for API integration)**: React, Next.js, React Native (Expo), responsive design
- **Core Computer Science**: DSA, Object-Oriented Programming (OOP), DBMS, Computer Networks, System Design

EXPERIENCE

- **Freelance Backend / Full-Stack Developer | Self-Employed** **Oct 2024 - Present**
  - Designed and shipped **RESTful APIs** in TypeScript/Node.js for independent clients, translating business requirements into normalized **PostgreSQL** schemas and secure, versioned endpoints.
  - Owned the full SDLC solo — API documentation, debugging and deployment — sustaining stable uptime across live client releases.
- **Vice-President | The Debugging Society, NSUT** **Oct 2026 - Present**
  - Led **5** engineers on a **Git**-based Agile workflow: branching conventions, PR reviews and documented code standards.
  - Engineered a centralized leaderboard backend scaling to **500+** active student profiles; coordinated **300+** event registrations.
- **Secretary | Finance and Economics Society, NSUT** **Oct 2026 - Present**
  - Built and deployed the society's official platform, integrating the React frontend with Node.js REST endpoints and driving **400+** user engagements.

PROJECTS

- **Attendr** *TypeScript, Node.js, PostgreSQL, Redis, Next.js, React Native, Tesseract OCR*
  - Built the TypeScript/Node.js REST backend for a cross-platform attendance tracker, scaling organically to **1100+** active students within **4 weeks** of launch.
  - Architected multi-tier **Redis** caching (5-min dynamic + 14-day fallback), cutting upstream load by **85%+** and enabling offline reads.
  - Modelled **PostgreSQL** schemas for per-student attendance history and tuned the queries powering background sync jobs and push alerts below the **75%** threshold.
  - Debugged and stabilized a custom-trained Tesseract OCR login pipeline, holding sub-second latency against a flaky legacy portal.
- **PrepStack** [GitHub] [Demo] *Next.js, Node.js, BullMQ, Redis, Socket.io, Gemini API*
  - Built a question-paper API serving **60+** concurrent queries via the Gemini API with exponential backoff and retry handling.
  - Offloaded heavy jobs to async **BullMQ/Redis** queues with Socket.io streaming, cutting processing wait times by **60%**.
- **DSABuddy** [GitHub] [Demo] *PostgreSQL, Express, Node.js, GraphQL, Redis, React*
  - Designed the API layer (**8+** GraphQL schemas/resolvers over Express), cutting response latency by **75%**.
  - Scaled to **1000+** users across **4** Delhi colleges on **PostgreSQL**, with Redis sorted sets caching real-time leaderboards.
- **Streamify** [GitHub] [Demo] *MongoDB, Express, Node.js, React, JWT*
  - Implemented JWT auth with secure refresh-token rotation and optimized **MongoDB** schemas for concurrent sessions.

ACHIEVEMENTS

- **Grand Finalist | Adobe Express Add-on Enterprise Hackathon** **2026**
  Built **Epsilon**, an Adobe Express add-on automating brand-kit alignment across design assets.
- **Semi-Finalist | Smart India Hackathon (SIH)** **2025**

EDUCATION

B.Tech in Instrumentation and Control Engineering **Expected 2028**
Netaji Subhas University of Technology — CGPA: 6.27/10

CBSE Class XII — *Navyug Convent School*, 78% **2022**