

Harsheet Sharma

Backend Engineer — Node.js, TypeScript, PostgreSQL, Redis, Distributed Systems

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linkedin.com/in/harsheet-sharma-64f63 — Nagpur, Maharashtra — Open to Remote / Relocation

Professional Summary

GSoC 2026 applicant and active open-source contributor (Rocket.Chat, AsyncAPI) with hands-on experience designing fault-tolerant distributed systems, idempotent APIs, and queue-based architectures. Built production-pattern projects handling concurrency, retries, and financial transaction safety. BCA graduate (2025), Rashtrasant Tukadoji Maharaj Nagpur University. Seeking a Backend / Full-Stack Engineer role where engineering fundamentals and system correctness are valued over buzzwords.

Open Source Contributions

Rocket.Chat — API Migration PR #40033 Mar 2026

Production TypeScript Codebase

- Migrated rooms.createDiscussion endpoint from deprecated routing to AJV-validated API format, aligning with Rocket.Chat's OpenAPI migration effort (10k+ GitHub stars).

Rocket.Chat — Federation Refactor PR #39688 Mar 2026

Production TypeScript Codebase

- Refactored Matrix user ID generation into a reusable utility across the federation module; caught and resolved a review-stage bug during iteration.

AsyncAPI — Mobile Layout Fix PR #1293 Mar 2026

Website & Tooling

- Fixed horizontal overflow on mobile in AsyncAPI Studio caused by unwrapped monospace strings; PR passed SonarCloud quality gate with zero new issues.

Google Summer of Code 2026 — Rocket.Chat Mar 2026

Applicant

- Submitted proposal for complete migration of legacy Rocket.Chat API to structured format with automated OpenAPI specification generation.

Projects

OpsFlow — *Distributed Workflow Orchestration Engine* github.com/harsheetsharma/opsflow

TypeScript Node.js Redis BullMQ PostgreSQL

- Designed separation of control plane (API) and execution plane (stateless workers), enabling horizontal scaling without shared state.
- Implemented exponential backoff retry strategy across 5,000+ concurrent job simulations; achieved 99% uptime and 90.5% job success rate under load.
- Persisted execution logs and job state in PostgreSQL for full observability and audit trail; reduced failed job conflicts by 85%.

Payment System — *Transaction-Safe Transfer Engine* github.com/harsheetsharma/paytm-complete

Node.js PostgreSQL Prisma Stripe

- Built peer-to-peer transfer system using database transactions and row-level locking to prevent race conditions and double-spending.
- Designed idempotent API endpoints to safely handle retries, webhook callbacks, and Stripe payment flows.
- Modeled ledger-style transaction storage; validated transactional consistency across 100+ concurrent user scenarios.

Technical Skills

- **Languages:** TypeScript, JavaScript, C++, C
- **Backend:** Node.js, Express.js, REST APIs, BullMQ, Background Jobs, WebSockets, Hono
- **Databases:** PostgreSQL, Redis, Prisma ORM, MySQL, MongoDB
- **Concepts:** Distributed Systems, Idempotency, Retries & Backoff, Concurrency Control, Caching, Fault Tolerance

- **DevOps & Tools:** Docker, GitHub Actions, Linux, Git, Postman, Swagger, AWS (Essentials)
- **Frontend:** React, Next.js, Tailwind CSS

Education & Certifications

Bachelor of Computer Applications (BCA)

Graduated 2025

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

Courses: Cohort 1.0 Full-Stack by Harkirat Singh, AWS Technical Essentials

Available immediately