

Tejas Nasa

+91 9599875310 | tejasnasa1908@gmail.com | [linkedin.com/in/tejasnasa](https://www.linkedin.com/in/tejasnasa) | github.com/tejasnasa | [portfolio](#)

PROFILE

Full Stack Developer focused on backend systems and real-time architectures, with experience building scalable collaborative platforms, AI-powered code analysis tools, and high-performance APIs.

TECHNICAL SKILLS

- **Languages:** JavaScript, TypeScript, Python, HTML5, CSS3, SQL, C/C++
- **Backend:** Node.js, Express.js, FastAPI, Socket.io, Yjs (CRDTs), Celery, Supabase, Firebase, BetterAuth, Zod
- **Frontend:** React.js, Next.js, TanStack Query, Tanstack Router, Redux, Zustand, Tailwind CSS, Recharts
- **DevOps & Tooling:** Git, GitHub, Turborepo, Vite, Postman, ESLint, Digital Ocean, Vercel
- **Database:** MySQL, PostgreSQL, MongoDB, Redis, pgvector, Prisma, Drizzle, SQLAlchemy

PROJECTS

Nimbus - Real Time Collaborative Workspace

[GitHub](#) | [Live Link](#)

Node.js, Socket.io, Redis, PostgreSQL, Yjs, Next.js, Excalidraw, Express, Prisma, Turborepo

- Architected a horizontally scalable WebSocket microservice using Node.js and Socket.io, integrating a Redis Pub/Sub adapter to concurrently route 5,000+ sub-millisecond state broadcasts per minute.
- Implemented a Conflict-Free Replicated Data Type (CRDT) engine with Yjs, resolving multi-client document merges by securely broadcasting incremental binary state updates and eliminating 90% of state-syncing conflicts.
- Developed a cohesive Next.js 16 collaborative workspace utilizing Turborepo, seamlessly integrating Markdown for rich-text, Excalidraw for infinite canvases, and supporting 5+ simultaneous editors alongside a context-aware embedded AI chat assistant.

Illume - AI-Powered Repo Analyzer

[GitHub](#) | [Live Link](#)

FastAPI, Next.js, PostgreSQL, SQLAlchemy, pgvector, Tree-sitter, Celery, React Force Graph

- Built a deterministic repository analyzer utilizing FastAPI and Tree-sitter, parsing Abstract Syntax Trees (AST) to extract structural dependencies across 500+ files into a unified PostgreSQL code graph.
- Architected a Retrieval-Augmented Generation (RAG) engine utilizing Celery for async AST chunking, storing 5,000+ embeddings via pgvector to enable deterministic, hallucination-free codebase querying.
- Engineered a Next.js frontend integrating React Force Graph 3D to natively render intricate 1,200+ node dependency charts, streaming real-time GitHub ingestion logs directly via WebSockets.

Echoes - Social Media Platform

[GitHub](#) | [Live Link](#)

Express, Node.js, React, Tanstack Router, Postgres, DrizzleORM, Tailwind, Tanstack Query

- Engineered a scalable REST API using Express and Node.js, leveraging PostgreSQL alongside Drizzle ORM to deterministically resolve and return complex data trees scaling across 500+ nested post records.
- Built a secure JWT authentication pipeline with bcrypt hashing, enforcing strict boundary-layer validation via Zod across 35+ endpoints and automating content compliance via separate event-driven GPT-5 moderation triggers.
- Developed a high-performance React SPA using TanStack Router, leveraging TanStack Query's aggressive caching strategies to reduce redundant API calls by 50% and deliver instant UI feedback.

EDUCATION

Bachelor of Technology in Information Technology

2023 – 2027

Maharaja Surajmal Institute of Technology, Delhi