Pranay Yadav

+91-9096016946 | pranayyadav08@gmail.com | github.com/gh0sty02 | pranayyadav.vercel.app | linkedin.com/in/pranayyadav02

Professional Summary

Senior Software Engineer with **4+ years** building scalable, full-stack systems across frontend (**React, TypeScript, Next.js**), backend (**NestJS, GraphQL, CQRS**), and **AI/ML** (**Python, LangChain**). Delivered pixel-perfect, accessible interfaces across **400+ clients**, cut onboarding time **45%**, and solo-built an **AI-powered budget forecasting system** using hybrid retrieval and **pgvector**, projected to cut planning effort **60-65%**. Also shipped a **human-in-the-loop AI coding agent** reducing dev cycles by **60%**. Deep expertise in **GraphQL**, **SSR**, web performance optimization, and AI-driven product features.

Work Experience

Senior Software Engineer Aug 2024 – Present
Dentsu *Pune, India*

- Architected an **AI-powered budget forecasting system** using RAG (Retrieval-Augmented Generation) with hybrid retrieval over historical client plans in pgvector, feeding retrieved context to an LLM via LangChain and LangGraph to generate recommendations, projected to cut planning effort **30-35%**.
- Reduced dev cycle time **60% per ticket** by building a **human-in-the-loop AI coding agent** that takes a Jira ticket and outputs code, unit tests, and Playwright E2E tests.
- Owned **45%** of dev work building the UI (React) and CQRS-based GraphQL backend (NestJS) for **Data Definition Manager**'s first release, cutting onboarding time **40%** across 400+ clients.
- Led a team of **3 engineers** migrating frontend clients to GraphQL, boosting performance **30%** through Apollo Client caching optimization.
- Led a team of **2 developers** to integrate Data Definition Manager with legacy apps for its release, owning **45%** of total integration work.
- Recovered **12 hours of client downtime** by resolving **3 critical production bugs** under live SLA pressure.

Frontend Developer June 2022 – July 2024
Netskope *Remote*

- Reduced diagnostic time **50%** for **100+ users** by building pixel-perfect enterprise dashboards in **React, TypeScript, and D3.js** from Figma designs, ensuring design fidelity across all breakpoints.
- Cut troubleshooting time **65%** for **300+ clients** by architecting a high-traffic web portal using **mobile-first** and **WCAG** accessibility standards with responsive, cross-browser compatible layouts.
- Processed **100MB+ files 50% faster** by building a multi-threaded HAR file sanitizer with **Web Workers**, offloading compute off the main thread for zero UI blocking.
- Cut bundle size **30%** and load time **35%** by modernizing legacy jQuery to **CSS3/ES6+** via **Webpack** and **ESLint**, maintaining full cross-browser compatibility.

Projects

ConverseX | *Next.js, TypeScript, Socket.IO, Prisma, PostgreSQL, LiveKit*

- Built **scalable real-time chat application** with **Next.js SSR** and **Socket.IO**, handling **100+ concurrent connections** with low-latency messaging.
- Implemented **responsive, accessible UI** with infinite scroll and **Zustand** state management; integrated **LiveKit** for **WebRTC**-based video and audio streaming, with role-based auth (Clerk) and CI/CD via GitHub Actions.

Technical Skills

Languages: JavaScript (ES6+), TypeScript, HTML5, CSS3, Python, SQL
Frameworks & Libraries: React.js, Next.js, Redux Toolkit, Zustand, React Query, D3.js, Node.js, NestJS, FastAPI
AI/ML: LangChain, LangGraph, Retrieval-Augmented Generation (RAG), Hybrid Retrieval, BM25, Hugging Face Embeddings (Nomic Embed), pgvector
Tooling: Webpack, ESLint, Babel, Rush, Web Workers, Web Components, WebRTC, Git, GitHub Actions, CI/CD, Docker
APIs & Data: GraphQL (Apollo Client), RESTful APIs, WebSockets, Prisma, PostgreSQL, MongoDB, Redis
Standards: Web Performance Optimization, Server-Side Rendering (SSR), Responsive Design, Cross-Browser Compatibility, Web Content Accessibility Guidelines (WCAG), Mobile-First, Design Fidelity
Testing: Jest, React Testing Library, Playwright, TDD

Education

Atharva College of Engineering (Mumbai University) Mumbai, India
Bachelor of Engineering in Computer Science *Aug 2018 – June 2022*