Ajay B Panigrahi

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Experience

Decodes Oct 2025 – Present
Full Stack Web Developer *Remote*

- Built **Edock** across web, backend, mobile, and admin with **React/TypeScript, Node.js/Express, PostgreSQL/Prisma**, Flutter, and AWS; shipped community moderation, member management, onboarding, event registration, dynamic theming, and web-to-mobile deep links.
- Engineered **real-time DMs, threaded chats, and media uploads**; migrated the rich-text editor from **Lexical to TipTap**, **cutting bundle size by 35%**, and added mention sanitization and paste protection.
- Co-developed the **Flutter iOS/Android app** with guest access, contact-based discovery, messaging, notifications, communities, deep links, and **Razorpay payments with invoice generation**.
- Implemented an **AWS S3 WebP pipeline** that **cut image payloads by 65%**; added **PWA capabilities** and hardened access controls with **AWS Cognito/Lambda**.
- Expanded frontend tests from **2 to 173 files**, authoring **163** with **Vitest/React Testing Library** (**30.7% line, 77.9% branch coverage**); extended **Playwright** E2E tests using reusable Page Object Models.

ChaiCode Apr 2025 – May 2025
Instructor / Coding Hero (Initiative by Hitesh Choudhary) *India (Remote)*

- Led weekly **4-hour advanced JavaScript masterclasses** for **100+ live students**, explaining event loops, closures, scope, Promises, and async/await.
- Prepared students for **frontend interviews** through live debugging, code walkthroughs, whiteboard problem solving, and technical Q&A.

Projects

Orbit | *React 19, Node.js, MongoDB, Socket.IO* Live Demo | Frontend | Backend

- Built a developer networking platform for founders and builders with **paginated swipe discovery** and **35 themes**; achieved **0.00 CLS and a 95+ Lighthouse score**.
- Engineered **Socket.IO** messaging with ref-based lifecycle controls and **react-virtuoso** virtualization, **reducing DOM nodes by 85%** and sustaining **60 FPS across 10,000+ messages**.
- Developed an **Express 5/MongoDB Atlas REST API** with compound indexes and **sub-40ms query latency**; automated daily **8:00 AM connection digests** with an **AWS SES** cron worker.
- Integrated **Razorpay payments** with **HMAC-SHA256 webhook verification**; deployed on **AWS EC2** using **PM2**, **Nginx** with WebSocket support, and **Cloudflare SSL**.

RecallQ | *React, FastAPI, Qdrant, MiniLM, Gemini* Live Demo | GitHub

- Developed a full-stack **retrieval-augmented generation (RAG)** application over **121 YouTube lecture transcripts**, enabling natural-language search with timestamped passages and embedded video playback.
- Implemented token-aware overlapping chunks, **MiniLM embeddings via ONNX Runtime**, and **Qdrant vector search** with keyword reranking and common Hinglish query normalization.
- Integrated on-demand **Gemini LLM summaries** grounded in retrieved passages, with validated source references and insufficient-evidence handling; deployed **React/FastAPI on Vercel** with corpus-aware search caching.

Technical Skills

Languages: JavaScript (ES6+), TypeScript, Python, C++, SQL, HTML5, CSS3
Frontend: React 19, Next.js, Redux Toolkit, Tailwind CSS, Framer Motion
Backend: Node.js, Express, FastAPI, Pydantic, Prisma, Mongoose, Socket.IO
Databases: PostgreSQL, MongoDB, Redis, Qdrant
AI Engineering: LLM API Integration, RAG, LangChain, LangGraph, Tool Calling, MCP, Multi-Agent Systems
Testing & Evaluation: Vitest, React Testing Library, Playwright, Jest, pytest, RAG Evaluation
Cloud & DevOps: AWS (EC2, S3, SES, Cognito), Docker, GitHub Actions, Nginx, Git, GitHub
AI Tools & Workflow: Claude Code, Cursor, GitHub Copilot, Codex, Prompt Engineering

Education

Gandhi Institute of Technology and Management Visakhapatnam, Andhra Pradesh
B.Tech in Computer Science Engineering *Oct 2021 – Jul 2025*