

ROHAN PATEL

Vadodara, Gujarat, India | +91 63532 23860 | rohanpatel.swe@gmail.com | [linkedin.com/in/rohanpatel-eng](https://www.linkedin.com/in/rohanpatel-eng) | github.com/rohanpatel2002

SUMMARY

Software Engineer specializing in infrastructure, distributed systems, and cloud-native applications. Core contributor to three production platforms and an enterprise compliance system at Praalak Tech Solutions; independently architected and shipped platforms for freelance clients. Author of two peer-reviewed ML papers.

TECHNICAL SKILLS

Languages: Go, Python, TypeScript, JavaScript, SQL

Backend & APIs: Go (Fiber, Chi, GORM), Node.js, REST API Design, GraphQL, Hasura, JWT Authentication, OAuth, Django REST Framework

AI Infrastructure: LangChain, LangGraph, RAG, Vector Databases (pgvector), Gemini & OpenAI APIs, Semantic Search, Embeddings, Prompt Engineering

Databases: PostgreSQL, MongoDB, Redis, Supabase, Row-Level Security, Multi-tenant Architecture

Cloud & DevOps: Google Cloud Platform (GCP), Docker, Serverless / Edge Functions, CI/CD, GitHub Actions, Vercel, Railway

Frontend & Mobile: React, TanStack Start, React Native, Expo, Tailwind CSS, Ant Design

PROFESSIONAL EXPERIENCE

Software Engineer — Praalak Tech Solutions

Jul 2025 – Present

Vadodara, Gujarat, India · Hybrid

Core Engineering

- Architected reusable backend services, authentication/authorization, and CI/CD pipelines — including shared multi-tenant PostgreSQL patterns (Node.js/Deno, Supabase RLS) — powering distributed systems across production platforms.

Key Platform Contributions

Coach Sophia — AI platform

- Engineered the multi-tenant backend (Node.js, PostgreSQL, Supabase) for a production AI platform, implementing authentication, authorization, and Row-Level Security across serverless Edge Functions to isolate tenant data.
- Implemented production RAG pipelines (LangChain, LangGraph, vector embeddings) powering an AI chat experience with context-aware conversations.
- Delivered the React and React Native clients for the platform — chat interface, document uploads, real-time workflows — deployed to production across web and mobile.

Regenerative Organic Alliance (ROA) — traceability & compliance platform

- Designed a Go backend compliance engine enforcing certificate business rules, validating shipment dates against scope-certificate windows across multi-certificate, multi-site cases.
- Extended GraphQL/Hasura queries to support the validation engine and built a React/Ant Design frontend surfacing real-time errors; added test coverage (Go, Vitest) and shipped to production.

Platform Improvements

TTPro — enterprise traceability platform

- Strengthened an existing enterprise traceability platform: implemented new certificate-validation features, fixed production bugs, and extended backend validation logic, building on the ROA architecture.

Software Engineer Intern — Physical Research Laboratory

Jan 2026 – Jun 2026

Ahmedabad, Gujarat, India · On-site

- Engineered a Python data pipeline and PyQt6/Matplotlib desktop analysis platform for astronomical polarization camera telemetry, delivering visualization comparable to SAOImage DS9.
- Optimized a vectorized NumPy calibration engine computing full Stokes parameter maps; resolved rendering bottlenecks via parallel QThread computation, cutting frame-update latency to near real-time.

FREELANCE SOFTWARE ENGINEER

ClimaGrowth — AgTech advisory platform (independent client, climagrowth.in)

- Backend Architecture: independently architected a Go/Fiber API gateway with Redis caching and PostgreSQL/Supabase, integrating Open-Meteo, NASA FIRMS, and Agmarknet data sources.
- Mobile Application: built an offline-first, multilingual (Gujarati/Hindi) React Native app for field-level crop advisory access.
- AI Infrastructure & Deployment: implemented a Gemini-powered RAG voice assistant (ClimaVOICE) and deployed the full stack — marketing site (React, TanStack Start), backend, and mobile — to production on Vercel.

Florida Olive Oil — e-commerce platform (independent client, floridaoliveoil.com)

- Delivered a production Shopify storefront - catalog, collections, checkout, theme customization - for a Florida specialty foods retailer.

PROJECTS

Docentra

- Designed a JWT-authenticated document search API (Go, Chi, GORM) with role-based authentication and authorization over private document libraries.
- Containerized a Python FastEmbed semantic embedding pipeline with pgvector similarity search for reproducible deployment.

Tribunal

- Developed an AI-assisted code-review platform (TypeScript, LLMs) performing semantic pull-request analysis to detect AI-generated code changes.
- Integrated architecture-risk detection using service-topology awareness to surface cross-service risk before merge.

IronClad

- Developing a Go-based deployment-intelligence gate that scores blast radius from a dependency graph before release.
- Implementing rollback-safety scoring to flag high-risk production deployments ahead of time.

PUBLICATIONS

- “Obesity Level Prediction Using Machine Learning,” ICICT 2025 — peer-reviewed paper predicting obesity levels from lifestyle and health data.
- “Predictive Analysis of Apple Stock Market Trends,” SmartCom 2025 — ML framework forecasting stock trends from financial indicators.

EDUCATION

Bachelor of Technology, Computer Science and Engineering — CHARUSAT