

Sri Ram Mohan Nyshadham

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SENIOR FULL STACK ENGINEER

Full Stack Engineer with 6+ years building production-grade web, mobile, and AI-powered platforms. Led a HIPAA-compliant clinical platform combining real-time WebSocket streams with LangGraph-orchestrated, LLM-driven documentation agents, boosting clinician decision speed and suggestion relevance. Architected cloud-native, containerized systems with Terraform/OpenTofu infrastructure-as-code and automated CI/CD for reproducible, scalable delivery. Treats AI as an accelerator for sound architecture, not a substitute for it. Seeking to apply full-stack and applied-AI expertise to high-impact internal platforms.

WORK EXPERIENCE

Full Stack Developer, Atelia Software Inc

June 2021 – Present

- Built and maintained large-scale, HIPAA-compliant full-stack applications using TypeScript, ReactJS, Next.js, React Native, Node.js, and NestJS, supporting secure patient, doctor, hospital, and support portals.
- Architected a multi-agent AI orchestration system with **LangGraph** (StateGraph routing, agent swarm, checkpointed state, and human-in-the-loop interrupts) on **Vertex AI**, combining prompt engineering, embeddings, and pgvector retrieval to drive multi-step clinical reasoning and raise suggestion relevance.
- Delivered client-facing AI features (LLM-powered chat, live scribe, and RAG documentation agents) over native WebSocket streams of live doctor-patient sessions, reducing latency and helping clinicians decide faster; used daily in production.
- Provisioned staging and production environments as code with **Terraform/OpenTofu**, building reusable modules for compute, Kubernetes, managed SQL, Pub/Sub, IAM, and secrets for reproducible, one-command setup.
- Deployed cloud-native, containerized services on Kubernetes (GKE) and Cloud Run behind managed PostgreSQL, VPC networking, and IAM, with GitHub Actions CI/CD for automated testing, builds, and multi-environment deploys.
- Architected Node.js and PostgreSQL backend services exposing REST APIs to web, mobile, and AI workflows, with indexing and query optimization for low-latency RAG retrieval at high volume.
- Led migration of mobile apps from Flutter to React Native and shipped to the Apple App Store and Google Play with native modules and BLE integrations.
- Optimized ReactJS performance with memoization and Zustand-based global state isolation to keep complex real-time clinical screens responsive, and enforced type safety with shared TypeScript contracts between frontend and backend.
- Built fault-tolerant backend services with structured logging, retries, and graceful degradation, and developed asynchronous background workers and pipelines for AI post-processing such as summarization and document generation.
- Integrated third-party services including Twilio Streams and Webhooks, authentication providers, and external healthcare systems for real-time communication and secure data exchange.
- Mentored backend, frontend, and mobile engineers and introduced code review and CI/CD practices, raising code quality and accelerating delivery.

- Engineered a full-scale CRM platform covering payroll, timesheets, placements, invoicing, onboarding, and document workflows using React.js, Material UI, Redux, and Firebase, with RBAC via Firebase Auth and Firestore rules.
- Built 40+ reusable React components and optimized rendering with memoization and selector-based state management, reducing UI load times by 30%.
- Developed backend business logic with Node.js, Express, and Firebase Cloud Functions (payroll computations, consultant margins, and automated tax/withholding calculations), with unit testing and debugging for reliability.
- Reduced production defects by resolving 150+ issues across payroll, invoice reconciliation, form validations, and authentication flows.
- Enhanced CI/CD with Firebase Hosting, GitHub Actions, and automated dev/stage/prod deployments, with Python build orchestration and branch-based code review.

PROJECTS

AI Portfolio: RAG Assistant

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Retrieval-augmented chatbot answering questions over a curated knowledge base, using Pinecone vector search with generation on Google Vertex AI (Gemini) and Amazon Bedrock (Claude), plus streaming responses, IP-based rate limiting, and an agentic email tool. Built on Next.js 15.

Cipher: End-to-End Encrypted Chat

cipher.codebyram.dev

Real-time 1:1 messaging with true end-to-end encryption: per-message AES-GCM-256 keys wrapped via RSA-OAEP-2048 in the browser (Web Crypto API), so the server stores only ciphertext. Next.js, Convex realtime sync, Better Auth (Google/GitHub OAuth), on Vercel + Convex Cloud.

Evenly: AI Grocery Bill Splitter

evenly.codebyram.dev

Native iOS and Android app that scans a grocery receipt and splits it item by item. Gemini 2.5 Flash on Vertex AI extracts line items into a structured schema, and a unit-tested, integer-cent split algorithm guarantees every per-person total reconciles to the receipt exactly. Built with Expo and Convex, with CI/CD via GitHub Actions and EAS.

EDUCATION

Kennesaw State University, Marietta, GA
Master of Science, Computer Science

SITE, Tadepalligudem, India
Bachelor of Technology, Computer Science

SKILLS

Languages	TypeScript, JavaScript, Python, SQL, Bash
Frontend & Backend	React, Next.js, React Native, Redux, Tailwind CSS, Node.js, Nest.js, Express.js, REST APIs
AI & Orchestration	LangGraph, LangChain, Vertex AI, Amazon Bedrock, RAG pipelines, embeddings, prompt engineering, agentic workflows
Cloud & IaC	Terraform/OpenTofu, Docker, Kubernetes (GKE); GCP (Cloud Run, Cloud SQL, Cloud Storage, Pub/Sub, IAM, Secrets Manager); AWS (EC2, Lambda, S3, CloudFront, Route 53, Elastic Beanstalk)
DevOps & Databases	GitHub Actions, CI/CD, Serverless, Vercel, Git; PostgreSQL, pgvector, Pinecone, Firestore, NoSQL
Tools & Platforms	Twilio, Prisma, Orval, Monorepos (pnpm)