

Abhiram Kanna Seelamanthula

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ABOUT ME

Founding engineer building production platform systems end-to-end — real-time messaging, notification infrastructure, and authorization at scale — across Postgres, Redis, Socket.IO, and Terraform-provisioned cloud. Anybody can prompt an AI into working code; what's scarce is the judgment to know which problem is worth solving and the eye to catch what a fast fix would miss. I'd rather spend the extra hour understanding a system than ship a fix that papers over it, and I default to designs where mistakes surface early instead of compounding silently in production.

EDUCATION

Gandhi Institute of Technology and Management, Visakhapatnam, India.

B.Tech, Artificial Intelligence & Machine Learning

2021 – 2025

Capstone Project: Automatic Segmentation of Pancreas and Pancreatic Tumor Using 3D U-Net

- Designed a pancreatic tumor segmentation system using 3D U-Net, with advanced data augmentation and parallel training across three overlapping dataset partitions to improve accuracy on a small, heavily imbalanced medical volume set.
- Coursework across machine learning, deep learning, computer vision, data structures & algorithms, operating systems, and databases.

SKILLS

Languages: TypeScript, Python, Go, JavaScript, SQL

Backend & Runtime: Node.js, Bun, TypeScript, Python, Go

Frontend: Next.js, React, TanStack Start, Server Components, Server Actions (RPC), RSC, React Native (Expo, EAS)

Real-time & Messaging: Socket.IO, Redis Pub/Sub, WebSockets, Event-driven Architecture

Databases: PostgreSQL (Supabase / native), MySQL, MongoDB, Redis & Valkey

Authorization: Postgres RLS (~270 policies), BetterAuth, Firebase Authentication

Infrastructure & Cloud: VPS deployment, Railway, Hetzner, Hostinger, Google Cloud Platform (GCP), Docker, Terraform, CI/CD pipelines, Monorepo Architecture

Observability & Tooling: PostHog (analytics, feature flags), Sentry, Drizzle ORM, Linear, Bun microservices, ffmpeg

AI / LLM Engineering: Retrieval-Augmented Generation (RAG), LangChain, LangGraph, OpenAI API, Vector Search & Embeddings, Prompt Engineering, Agent Tooling, Tool-Calling Agents & Agentic Workflow Design (production-grade: scoped read-only tools, structured output, streaming)

Creative: Graphic Design, Video Editing, Sound Design, Photography & Cinematography

Notable Achievements: Winner at IIAM Pinnacle 2025 Incubation Business Pitch, Top 3 in SUS HACKS, Placed 6th in Campus-wide Career Training Program

- Creative Advisor – Entrepreneurs' Club (2023–25) — led the club's visual identity, supported club decisions and event production across two academic years and beyond.
- Public Speaking – Ran professional seminars including 'Productivity Tools for Entrepreneurs,' two hands-on video editing workshops, and one on 'Principles of Design'
- Mentor, Smart India Hackathon 2025 (GITAM internal edition); mentors student-led tech startups on architecture and creative strategy. Open source: ships and maintains developer tools independently, including [gitswitch.dev](https://github.com/abhiramkanna/gitswitch.dev), and writes documentation and install tooling as part of the product rather than after it.

EXPERIENCE

Edirq Inc. – Founding Software Engineer

October 2025 – August 2026

San Jose, California, United States (Remote)

Building Re, a cohort-based social network. Full end-to-end ownership of critical platform systems, from architecture through production deployment.

- Architected a real-time notification system with adaptive rate limiting, sliding-window batching for high-volume events, and smart aggregation, reducing notification state storage by 99.96% via flag-based tracking instead of per-notification persistence.
- Shipped a full direct-messaging system on Socket.IO and Redis Pub/Sub for horizontal scalability: real-time delivery, cursor-based pagination, full-text search (pg_trgm), S3 attachments, read receipts, presence, and Row-Level Security for per-request data isolation.
- Designed the platform authorization layer — cohort visibility, block lists, and brand-account bypass rules — enforced through ~270 Postgres RLS policies and 67 helper functions.
- Instrumented key user flows with PostHog analytics and feature flags (frontend + backend), giving the team product telemetry and safe progressive rollouts on a codebase shipping daily.
- Migrated infrastructure provisioning to Terraform (Railway environments, Cloudflare Zero Trust as IaC) and provisioned an isolated staging environment across API, notifications queue, and post-scores worker to cleanly split dev, staging, and production.
- Led platform-wide architecture decisions and development workflow (Linear), reviewed all backend changes, and carried some light legal/compliance work as one of the first engineers.

Maple Software Pvt. Ltd. – Summer Intern

May 2024 – June 2024

Project: Semantic Search Engine

- Built a semantic search engine, optimizing query vectorization and indexing to cut response times by 40%.
- Improved search relevance by 30% using embedding-based retrieval (RAG-style), NLP preprocessing, and a self-optimizing, context-aware pipeline. Benchmarked vector index configurations and chunking strategies against a hand-labelled relevance set, then documented the tradeoffs so the team could tune retrieval without re-running the experiment.

Why Us Media (Startup) – Creative Lead

July 2024 – October 2024

- Directed creative vision and content strategy, increasing brand visibility 40% and doubling media pipeline throughput.
- Led a team of 5 producing a major ad shoot and a reel series for Local Hungama, delivered on schedule.

PERSONAL PROJECTS

gitswitch.dev (website – gitswitch.dev)

May 2026 – Present

- Runs multiple GitHub accounts on one machine — switches git user.name/email, SSH key, GPG signing key, and gh CLI auth together, with repository pinning and session isolation across terminals. **47 GitHub stars, 300+ downloads as of September 2026.**
- Ships agent-native tooling: a Claude Code skill so coding agents detect identity mismatches and call gitswitch directly, plus reauthor to fix commits made under the wrong identity. Sets core.sshCommand with IdentitiesOnly to prevent SSH agent fallback. Handles what 'gh auth switch' intentionally doesn't: commit identity is separate from API tokens, so gitswitch manages both — with parallel account support and a shell hook that learns which profile you use per repo and suggests it on cd.
- Keyboard- and mouse-driven TUI, 11 themes, zero runtime dependencies — single static binary. Studied 30+ existing implementations first; none matched it on polish, install experience, or AI-agent readiness.

The Mockify Project ([GitHub](#) + [Story](#))

May 2025 – July 2025

- 2-person team shipped 12+ integrated modules in 8 weeks — e-commerce, career portal, event management, forums, and a site-wide gamified rewards system — on Next.js, Supabase, and custom Bun microservices on a private VPS.
- Owned backend architecture: automated invoicing, real-time notifications, targeted ads, and email workflows; cut infrastructure costs 50%.

Active Chat ([GitHub](#))

- Anonymous ephemeral rooms — fully private, with chat history wiped on exit — built on Next.js, Supabase realtime, and Google OAuth with no dedicated server to operate. Designed the room lifecycle so the privacy guarantee is structural rather than a policy: nothing durable is written that would need deleting later.