

SAI NAVANEETH V

Solution Architect | AI & Full-Stack Engineer
Bengaluru, India

[+919886002292](tel:+919886002292) | sainavaneeth@gmail.com | navaneethvijay.in | [Github](#)

PROFESSIONAL SUMMARY

Staff-level Solution Architect and AI-native Full-Stack Engineer with 8+ years of experience designing, scaling, and delivering high-performance web platforms, multi-tenant SaaS architectures, and production-grade AI solutions. Proven track record of translating complex product visions into highly scalable composable (MACH) and microservices systems. Pioneer in Applied AI engineering, specializing in building autonomous agentic tool-calling workflows, human-in-the-loop validation pipelines, and sqlite-based semantic search graphs. A product-minded builder obsessed with business-critical outcomes: delivered systems driving a **40% increase in checkout conversions**, **30% reduction in last-mile operational failures**, and **30% page-load performance gains**.

CORE SKILLS

Architecture & Systems Design	Microservices, Micro-Frontends, Composable (MACH) Architecture, API Design, High-Load Caching
Applied AI & Workflows	LLM APIs (OpenAI, Anthropic, Gemini), RAG & Vector Search (pgvector, Pinecone, Supabase Vector), Tool-calling Agents
Frontend Technologies	React, Next.js, Vue.js, Vue Storefront, Redux, React Native (Expo), TailwindCSS, TypeScript
Backend & Cloud Infrastructure	Node.js, Express, Hono, PHP, Laravel, PostgreSQL, MySQL, Redis, Supabase, Cloud Run, Vercel, AWS (EC2, S3, ALB)
DevOps & Testing Automation	Docker, GitHub Actions (CI/CD), Nginx, Jest, Playwright, Storybook, Automated Visual Regression Testing (BackstopJS)

PROJECTS

Work built outside of Codilar, including one freelance engagement and several self-directed applied-AI tools

Flowmail | Founder & Lead Developer (AI Email Productivity Platform)

- Building a full-stack Next.js and Node.js platform deployed on Google Cloud Run with Supabase, integrating with Gmail via OAuth and completing Google's sensitive-scope API verification process. [\[Live Demo\]](#)
- Designed an AI feature (Gemini API) suggesting board organization and automated rules with a human-in-the-loop accept/reject workflow, including per-user token quotas, usage tracking, and cached thread summarization.

Drupal Copilot | Architect (Agentic AI CMS Tool)

- Built and tested a working prototype of an LLM tool-calling agent that answers natural-language questions about a Drupal site's content and configuration.
- Combined an automated crawler that builds a searchable SQLite full-text search knowledge graph with a streaming agentic chat interface (Next.js, OpenRouter/OpenAI) featuring live execution tracing of tool calls and token usage.

Rynto | Freelance Product Creator (Property Management SaaS)

- Independently designed, built, and shipped a live mobile app (Expo/React Native, TypeScript, Supabase, PostgreSQL) currently in active daily production, owning both the product and technical delivery alone.
- Engineered a double-entry financial ledger system tracking property balances, tenant KYC verification (Aadhaar/PAN) with row-level-security private storage, secure signed-URL access, and push notifications.
- Manages full production pipeline: native Android/iOS builds and app signing, Supabase schema migrations, and app store release management.

Overwatch Node | Creator (Cross-Platform Device Control App)

- Built a native macOS menu bar app in Swift that exposes running apps and system state over a local WebSocket server, discoverable via Bonjour (mDNS). [[GitHub Repository](#)]
- Developed a companion React Native (Expo, TypeScript) mobile app that discovers the Mac automatically and allows real-time switching between running apps over the local network.

BackstopJS-UI | Creator & Open-Source Contributor

- Built and published a self-hosted visual regression testing tool (Vite, React, Playwright) on top of BackstopJS. [[GitHub Repository](#)]
- Integrated a GitHub Actions CI/CD pipeline that crawls a sitemap, captures reference and test screenshots across staging and production, and deploys results to Vercel.

Self-Hosted Image Optimizer | Creator

- Developed a high-performance image optimization server using Node.js, heavily inspired by Next.js's image optimization pipeline. [[GitHub Repository](#)]
- Leveraged GoogleChromeLabs' Squoosh under the hood to compress and optimize images on-the-fly, reducing asset overhead.

Custom Ecommerce Cart Rules Generator | Creator

- Designed and built a standalone custom cart rules engine built with Node.js, Redis, and Postgres, intended for heavy marketing campaigns. [[GitHub Repository](#)]
- Structured robust API integration endpoints supporting direct sync with Product Information Managers (PIM) and Order Management Systems (OMS).

PROFESSIONAL EXPERIENCE

Solution Architect / Technical Lead

Codilar Technologies Pvt. Ltd. | Bengaluru, India | 2018 - Present

- Own technical architecture, full-stack product strategy, and cloud-native deployment (TypeScript, Node.js, React, GraphQL) for high-scale platforms, managing multi-million dollar transaction volumes and hundreds of thousands of monthly active users.
- Designed custom state-management and lazy-loading patterns that slashed initial page load times by 30%, directly improving user conversion rates.
- Built automated CI/CD pipelines using GitHub Actions, accelerating feature deployment velocity by 40% across engineering teams.
- Set high-quality engineering and testing standards across multiple projects, and mentored 10+ junior and mid-level engineers into core system contributors.

Key Enterprise Architectures Delivered (at Codilar):

Bayer Pharmaceuticals (Germany) – Team Lead

- Promoted to Team Lead to take full ownership of frontend delivery and engineering timelines for a high-traffic pharmaceutical platform.
- Engineered a decoupled microservices platform connecting a headless CMS to a high-scale Next.js application, architecting the production infrastructure on Vercel including secure edge routing and global performance budgets.
- Built a testing and quality system from the ground up (Jest, Storybook, Playwright, coverage thresholds) and a custom visual regression engine to support fast, zero-defect production releases.

Tiger-One Distribution – Solution Architect

- Architected a multi-tenant platform supporting regional B2B and B2C models across multiple countries for a global distribution client, using Adobe Commerce as a headless backend (serving an estimated several hundred thousand monthly visitors).
- Delivered a high-performance PWA storefront achieving near-instant page transitions and sub-second mobile load times, driving engagement and conversions across regional storefronts.

Danube Homes – Technical Lead

- Designed a real-time inventory and order management system synchronizing complex data across multiple third-party CRM/ERP systems and 5+ global fulfillment centers.
- Engineered a custom geospatial checkout experience using the Google Maps API, reducing last-mile delivery failures by 30% and increasing successful checkouts by 40%.

Aldo Singapore – Senior Frontend Developer

- Contributed to a distributed order management system built on a composable (MACH) architecture on AWS, supporting a high-volume retail catalog.
- Recovered 20% of lost page load speed through automated caching, edge execution budgets, and lazy-loaded third-party scripts.

Samyakk – Senior Frontend Developer

- Led the transition of a massive retail catalog with thousands of SKUs to a decoupled, headless commerce architecture using Vue Storefront.
- Built asynchronous filtering and product recommendation systems to support a fast, app-like mobile experience with heavy media assets.

CERTIFICATIONS & AWARDS

- Adobe Certified Expert: Digital Experience Front-End Developer
- World Traveler Award (Meet Magento NY): Honored for outstanding global architecture execution.
- B2B Champ Award (Meet Magento India): Awarded for best-in-class scalable B2B enterprise infrastructure.
- Adobe Experience Maker Award: Recognized for building high-performance, multi-currency localization engines.

EDUCATION

Bachelor of Engineering (B.E.) in Information Science and Technology

BNM Institute of Technology, Bengaluru, India