

HANIF CARROLL

Fullstack AI Engineer | I Build Products for Startups

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Summary

I help early-stage founders ship ambitious products. Solo-built an AI event platform with conversational search across 5 live data sources. Built ML inference pipelines, distributed video processing, and billing infrastructure for an AI startup. I work fast across the full stack, from React/Next.js to AI agents with tool use and semantic search.

Skills

- **AI:** Claude API | OpenAI API | Gemini API | Vercel AI SDK | pgvector | RAG | Embeddings | Tool Use
- **Product:** Strategy | User Research | Prototyping | MVP Development
- **Frontend:** React | TypeScript | Next.js | TanStack (Query/Router/Start) | Zustand | Tailwind
- **Backend/Infra:** Node.js | PostgreSQL | Prisma | Supabase | Trigger.dev | Docker | Serverless GPU

Work Experience

Full-stack Software Engineer	Freelance	Sep 2024 – Current
AI Image & Video Generation Platform for E-commerce		
<ul style="list-style-type: none">• Built end-to-end ML inference pipeline: Dockerized diffusion model, deployed to serverless GPU, integrated with Next.js application.• Built the AI text-editing pipeline end-to-end: Vision OCR for text detection, inpainting for removal, and font matching for seamless replacement in product photos.• Architected a distributed video processing pipeline using pg-boss and Node.js, implementing idempotent retry logic and rate limiting to manage concurrent workloads across 10+ external AI providers (OpenAI, Runway, Kling).• Engineered a custom two-pool credit billing system with Stripe integration; implemented idempotent webhook processing and atomic database operations to ensure financial accuracy during concurrent usage.• Modernized frontend architecture by migrating to TanStack Query and Zustand, enabling optimistic UI updates for real-time tracking of long-running video generation jobs.		
Social Events Platform		
<ul style="list-style-type: none">• Led the migration to a TypeScript Monorepo, implementing shared Zod schemas to enforce type safety across the stack; this significantly reduced integration bugs and improved developer velocity for the junior team.• Established strict CI/CD and Code Quality standards, migrating the API layer to typed services and eliminating technical debt to prepare the platform for public scale.• Led team of 3 as Fractional CTO, mentoring 2 junior developers while modernizing architecture.		
Senior Front End Engineer	Nearsure	Feb 2023 – Feb 2024
<ul style="list-style-type: none">• Improved efficiency and user satisfaction for 3,000+ sports organizers by engineering an interactive, user-friendly scheduling tool.• Enhanced mobile experience by developing an optimized list view that enabled rapid event editing on mobile devices.		
Front End Engineer	LeagueApps	Nov 2021 – Feb 2023

- Reduced scheduling time by 45% and enhanced UX by implementing an intuitive drag-and-drop scheduling grid.
- Built comprehensive reporting modules with AG Grid, focusing on clear data presentation for event planning and analysis.
- Eliminated team double-booking issues by engineering an automated conflict detection system with clear user notifications.
- Established a standardized front-end component library using Styled Components and Storybook, ensuring consistent user experience across the application.

Software Developer

Capgemini

Jan 2019 – Oct 2021

- Boosted development productivity by reducing test suite execution time by 60% (~20 min/cycle).
- Designed and implemented executive KPI dashboards, focusing on clear data visualization for leadership decision-making.

Featured Projects

- **BA Eventos** - AI event discovery for Buenos Aires with 3,200+ events from 5 scraped sources (Passline, Eventbrite, Meetup, Luma, BA Tourism). Users find events through conversation—search, save, share, get directions—all via a Claude agent with 17 tools achieving full UI parity. Built semantic search with OpenAI embeddings + pgvector, bilingual enrichment pipeline, and Trigger.dev background jobs for automated scraping.
- **Vox Prismatic** - Designed and deployed a full-stack AI SaaS MVP that processes client call transcripts then generates and schedules LinkedIn posts, streamlining coaches' and consultants' content workflows.

Education

- **B.S. in Health Sciences**, University of South Florida