

Hanif Carroll

Applied AI Engineer | AI tools for business workflows

U.S. citizen · Buenos Aires, Argentina · U.S. hours · Open to remote employment or contracts through HC Studio LLC

hanif@hanifcarroll.com | linkedin.com/in/hanifcarroll | github.com/hanifcarroll | hanifcarroll.com

Summary

Applied AI Engineer with eight years of software engineering experience. Builds AI-powered web and mobile products, from early prototypes to production. Partnered with founders to launch Palabrundo across web, iOS and Android and help Genrupt serve its first 200 paying customers.

Technical Skills

Applied AI: RAG / hybrid retrieval, structured outputs, tool calling / MCP, LLM evaluations, LangGraph, LangSmith

Languages & Backend: TypeScript, Python, FastAPI, Pydantic, Node.js, PostgreSQL, Supabase, Zod

Frontend & Mobile: React, Next.js, SvelteKit, React Native / Expo

Cloud & Developer Tools: AWS, Vercel, Cloudflare Workers / Workflows, Docker, GitHub Actions, Playwright

Work Experience

Founder & AI Product Engineer

HC Studio

Mar 2024 – Present

- Built and operated independent AI products and delivered client products with founders, covering product design, software engineering and operations.
- Partnered directly with founders to launch Palabrundo on web, iOS and Android and help Genrupt serve its first 200 paying customers.
- Optimized browser-based data collection for BA Eventos and Casamo, bringing their combined Browserbase usage within the plan allowance.

Casamo — AI Product Engineer

- Built a SvelteKit AI rental-research product that lets users compare listings on a map or side by side, with source-linked findings and saved selections.
- Built recoverable listing research with Cloudflare Workflows, preserving completed work through checkpoints and preventing queue delays from triggering premature timeouts.

BA Eventos — AI Product Engineer

- Built conversational event search across a six-source catalog, combining semantic and keyword retrieval with venue and date filters.
- Built regression evaluations to check that recommendations stayed grounded in the event catalog and follow-up questions referred to the right events.

Palabrundo — AI Product Engineer

- Built web and mobile reading interfaces with phrase selection, connected text highlights and vocabulary notes tailored to the passage.
- Built a Spanish text-processing pipeline combining linguistic rules and constrained LLM generation to create contextual learning cards, with output validation, targeted regeneration of invalid cards and regression tests.

Genrupt — AI Product Engineer

- Built recoverable AI generation workflows with atomic PostgreSQL credit reservations and row locking, reusing existing provider jobs and preventing duplicate credit settlement.
- Enabled agents to use seller workflows through MCP, with OAuth authentication, organization-level access controls and asynchronous results.

Mucho Hangouts — Fractional CTO

- Served as Fractional CTO on a five-person team, mentoring two junior developers through code reviews, pair programming and reusable frontend patterns.
- Strengthened a loosely typed TypeScript backend with explicit service types and Zod validation for authentication and user APIs.

Senior Frontend Engineer

LeagueApps, later via Nearsure

Nov 2021 – Feb 2024

- Modernized tournament scheduling with React on the company's first migration team, helping establish shared frontend patterns and components.
- Built drag-and-drop scheduling, conflict detection, and double-booking prevention, reducing organizer scheduling time by 45%.
- Built self-service reporting with AG Grid; used virtualization and memoization for tens of thousands of rows, reducing load and interaction lag by 70%.

Software Engineer

Capgemini

Jan 2019 – Oct 2021

- Delivered a reporting module for Disney Cruise Line's ship and crew management system.
- Built executive KPI dashboards for Cisco.
- Maintained five Java Spring Boot microservices for GE Aviation, collaborating across offshore teams.

Frontend Engineer

8base

Nov 2017 – Nov 2018

- Built Jira / GitLab CI/CD automation and refactored 20+ shared UI components into a reusable library, reducing duplicate code by 30%.

Selected Projects

Switchboard — AI change-management demo | [Live demo](#)

- Built a Python/FastAPI and LangGraph agent that gathers permission-scoped evidence and checks policy interpretations before proposing changes for human approval.
- Deployed the demo on AWS using Step Functions, SQS and DynamoDB, with transactional configuration updates and signed delivery verification.

Languages

- **English** — Native
- **Spanish** — Professional working proficiency

Education

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