

Technical Skills

Front End | TypeScript, NextJS, Astro, Svelte, React Hooks + Context API, Redux, JavaScript, D3, Shadcn/ui, TailwindCSS, ChakraUI, v0
Back End | Vercel Serverless Functions, Edge Functions, GraphQL, MongoDB, MySQL, Prisma, Supabase, Firebase, Redis, Python
Deployment | Vercel Platform, Github Actions, Github Apps, Vercel CLI, Deploy Hooks, Vercel REST API, Docker, Heroku, DigitalOcean, Electron, AWS: EC2, AWS Lambda Functions, Google Cloud Functions
DevOps | Turbopack, Turborepo, Azure DevOps Integration, Observability Tools, Trigger.dev, Datadog, Artillery.io, TDD prompt engineering, Critical-CSS, React-Suspense, NGINX

Software Engineering Work

Rivendell - AI Development and Research Tool

AI development tool that functions both internally for the company and externally for clients as "version control for reasoning".

- Implemented a monte-carlo algorithm to run large batches of prompt calls in parallel to various large-language AI models (llms), providing more deterministic outcomes by improving reliable code metrics such as compute and readability.
- Configured OpenAI API and Anthropic API models to match relevant files and open a branch with a deployment in Vercel.
- Built a monte carlo visualizer with ThreeJS to visualise similar response clusters in 3d space.

AI Applications for National Not-for-Profit Education Research Organization*

AI teaching application featuring a multiplayer AI chat and advanced deep research enabled.

- Implemented interactive AI communication tools.
- Deployed a bespoke multi-tenant architecture implementation.
- Designed and implemented interactive interface templates to facilitate AI context and responses.

AI Analysis Tools For International Wildfire Science and Technology Company*

Cloud-based SaaS offering on-demand wildfire spread prediction capabilities to support operational response.

- Implemented unique systems to improve UI interactivity.
- Utilized secured backends to make safe API calls to private data from public sources.
- Created AI-driven assessment tools and forecast features to improve event response times for 20,000+ incidents per year.

CRM Management App to Handle Insurance Clients and Potential Leads* - lineagecrm.com

Final expense CRM management app and tool for handling clients and leads, currently deployed with more than 200 active users.

- Integrated applications to identify potential market opportunities.
- Completed Extract, Transform, Load (ETL) process from legacy backend into new database connections.

***Subject to NDA. No further details are available.**

Professional Experience

Principal Software Architect, Silver Bow Technology Group — 2025

- Lead software engineering team and built the core AI functionality for a "version control for reasoning" dev tool providing AI-driven code-generation, prompt enhancement, architecture strategy, as well as project planning and security features.

Software Engineer, Black Flag Design — 2024-2025

- Contributed code across five projects in simultaneous development, including Lead Developer of an AI codegen application and internal dev tool, subject to a signed NDA.
- Led, scripted, and hosted the 'AI DIY' podcast series on AI coding trends, Vercel's ecosystem and events in the tech industry.

Lead Designer, Gianni Ranaulo Design, Dubai, UAE — 2016

Lead Designer, Xuberance Design, Shanghai, China — 2013-2015

Education

Rust Developer Bootcamp — Learned Rust independently with Certificate of Completion — 2022

AlgoExpert.io — Certificate of Completion for solving 100 technical interview questions — 2022

Hack Reactor, Austin, Texas — Graduated March 2021

Gnomon School of Visual Effects, Los Angeles, California — Studied computer animation, computer programming — 2017-2018

Southern California Institute of Architecture, Los Angeles, California — Completed 35 hours towards Masters degree in Architecture, 3.5/4.0 GPA — 2016-2017

Texas A&M University, Bachelor of Science - Environmental Design — Graduated Cum Laude 3.5/4.0 GPA — 2015