CURRICULUM VITAE

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Software Engineer | Solutions Architect | Agent Orchestrator

Residence: Managua, Nicaragua
Services: Design systems, frontend and full-stack apps, AI agent pipelines, data pipelines
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Profile

I build design systems, and the AI agents that turn designs into production code. At Critical Mass I built a LangGraph pipeline that converts one set of components into React, Vue, Svelte and vanilla JS libraries; moving its critical steps into MCP tools made prototyping three times faster. At Omnicom I'm moving Amazon Ads' content to AEM, and I built Adobe's launch site for its AI Agentic Operating Model at Adobe MAX. Over 8 years I've shipped for agencies, enterprise brands and startups, mostly frontend and often full stack. On my own time I build AI products for small businesses in Nicaragua, because the owners around me should get the same productivity jump that developers already have.

Technical Skills

- **Languages:** TypeScript/JavaScript, Go, Python, R, Solidity, SQL, HTML (Web Components), CSS (PostCSS), Java (AEM models).
- **APIs:** REST (OpenAPI), GraphQL (Apollo, Relay), tRPC, gRPC, WebSockets, MCP/JSON-RPC.
- **Frameworks:** React/Next.js, Vue/Nuxt, Svelte, Lit, Astro, NestJS, Chi, Django, FastAPI, Strapi, OpenZeppelin.
- **AI:** LangGraph, Google ADK, Gemini, OpenAI, MCP servers, agentic coding workflows.
- **Tooling:** AEM (incl. Edge Delivery Services), Storybook, Nx, Style Dictionary, Tokens Studio, GitHub Actions, Changesets, Webpack Module Federation.

Enterprise Work Experience

Senior Software Engineer at Omnicom *Full Time Contractor (June 2026 – Present)*

Amazon Ads

- Move Amazon Ads' content architecture to AEM, on schedule for launch at Amazon unBoxed.
- Build the new Amazon Ads design system as native AEM components, on a composable architecture I designed.
- Set the architecture standards for the repository and enforce them.
- Map design tokens to component properties automatically, so designers' decisions reach the code without manual work.
- Use the AEM Style System so authors can switch between a pattern's variants without new components.
- Tell designers early what a design will cost to build, and propose alternatives when it's too much.
- Build the motion for an attention-grabbing component that thousands of publishers and advertisers see.
- Write Java models and AEM dialogs for new and existing components.

Adobe

- Built the launch site for Adobe's AI Agentic Operating Model (AAOM), shown at Adobe MAX: 15+ components on AEM Edge Delivery Services.
- Wrote block contracts and a component catalog, so authors and AI agents get the same result from the same input.
- Set up the codebase for AI coding agents: secure conventions, lint rules and 9 architecture decision records they must follow.
- Simplified the content workflow and added pipeline checks that catch broken content before it ships.

Senior Software Engineer at Critical Mass *Full Time Contractor (May 2025 – March 2026)*

- Built and ran a self-healing LangGraph loop that turns one set of scaffold components into React, Vue, Svelte 5 and vanilla JS libraries.
- Moved the pipeline's critical steps into internal MCP tools, so agents could go from design to code alone. Prototyping got three times faster.
- Designed a design system in three layers (data, events, tokens and styles), with Storybook for each framework.
- Wrote a CLI that pulls tokens from Tokens Studio and turns them into CSS variables with Style Dictionary.
- Built the base style library in PostCSS, with proxy variables and mixins that components inherit.
- Added Nx to cache pipeline tasks, and GitHub Actions with Changesets to version and publish every package.

Senior Software Engineer at Digital Arts Network (New Zealand) *Full Time Contractor (April 2024 – April 2025)*

- Built React component libraries for luxury real estate and hospitality brands.
- Wrote a rendering engine in Next.js so editors could build page structures in AEM.
- Improved LCP by 39% and cut client-side requests by 78%; added a caching layer for queries.
- Planned and built the cart, signup, search and filtering, localization, and a booking calendar that keeps time zones in sync.
- Mentored teammates and debugged the hardest issues in existing React apps.

Frontend Engineer at Jolt Software *via Nicasource (Sept 2022 – April 2024)*

- Cut initial load time of the microfrontends by 80%.
- Built the app shell that shares context between microservices, using Webpack Module Federation.
- Built interfaces for many microservices with React 18 (RTK) and GraphQL (Apollo), with automated tests.
- Rewrote legacy AngularJS screens in React and maintained the Yii backend.
- Mentored new frontend engineers; clearer code reviews cut review time by 40%.

Full Stack Engineer at Now Optics *Full Time (Oct 2021 – May 2022)*

- Built booking, catalog and payment flows for two e-commerce sites (Next.js and a custom Strapi CMS).
- Wrote a Go script that loads product catalogs into Strapi.
- Built Express APIs that collect customer satisfaction feedback from every store in the US.
- Connected back-end services and databases, and turned business needs into technical requirements.

Data Engineer / Software Developer at CATIE *Consultant (Jun 2019 – Jul 2021)*

CATIE (Centro Agronómico Tropical de Investigación y Enseñanza) helps rural communities become sustainable through research and education. I built the tools its researchers used:

- Offline data collection apps in Django, for field work without a connection.

- PostgreSQL schemas, with scripts that cleaned the research datasets.
- A research knowledge base with Contentful, GraphQL and Next.js.

Accountant and Bookkeeper at Café Integral *Part Time (Jul 2018 – Feb 2019)*

- Kept the books in QuickBooks: bank reconciliations, daily records and tax preparation.
- Processed orders and planned catering for clients like Microsoft and Everlane.

Independent Work

Freelance Software Engineer *(June 2018 – Present)*

- Take startups and solo founders from idea to running product: planning, design, build, testing, deployment and maintenance.

Founder / Solo Builder at tramo.digital *AI website builder for small businesses*

A business owner describes their business in a chat, in Spanish, and gets a published website and a small CRM. I built all of it: the design system, the agents, the backend and the hosting.

- Wrote 69 components once; a self-healing agent pipeline turns them into React, Vue, Svelte and Lit libraries, and each must pass unit tests, type checks, Storybook interaction tests and linting.
- Cut hallucinated output by 99% because the agents can only use a typed component registry: a router sends each request to one specialist (brief, theme, logo, page, advice), and drafts that fail checks get retried and reviewed.
- Built a token pipeline (Tokens Studio, Style Dictionary, PostCSS) behind 11 switchable themes, so a generated logo and palette restyle the whole site.
- Run it as an Nx monorepo of 25 packages: NestJS, PostgreSQL and an MCP server, with sites published to their own subdomains on Cloudflare Workers without a build step.

Founder / Solo Builder at NAI (Nicairagua Studio) *AI creative studio for architecture and brands*

Architects and brands describe a space or product and get photorealistic renders and short videos that look like Nicaragua, not like a stock photo of somewhere else.

- Put 6 AI providers (Google Gemini and Veo, OpenAI, ByteDance, Black Forest Labs, MiniMax) behind one interface, with a job queue that caps concurrent renders and streams progress to the user.
- Wrote a prompt engine that sorts each request into 9 creative personas, finds which of Nicaragua's 17 departments it's set in, and adds the terrain, climate and local style the models don't know.
- Run AI tools in isolated MCP processes inside a NestJS backend, so they can't reach the rest of the system; a credit ledger handles subscriptions, render packs and refunds.
- Deployed on Google Cloud (Cloud Build, Cloud Run, Cloud SQL on a private network); a migration job must pass before each release goes live.

Education

- **Universidad Americana (Nicaragua)** – BS degree in Finances and Accounting Systems (2014 – 2020)
- **Linnaeus University (Sweden)** – Leadership, entrepreneurship and innovation international program (2015 – 2016)

Languages

Spanish – Native · English – C2 · French – B1 · Swedish – A2