

Adam A. Gonzales

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Education

University of California, Santa Cruz
B.S. Computer Science

Santa Cruz, CA
May 2026

Experience

Tochtli – AI Studio Platform

San Jose, CA

Software Engineering Contract

March 2026 – Present

- Built an AI-powered brand automation platform using **RAG** and **agent-based workflows (LangChain, LangGraph)** to generate culturally grounded social media posts and newsletters from 1,000+ pages of Aztec reference materials
- Developed a multi-source ingestion and retrieval pipeline using **PyMuPDF, SentenceTransformers, and LlamaIndex**, organizing cultural knowledge into structured thematic embeddings for targeted search
- Implemented scoped semantic search with **PostgreSQL + PGVector** to ground outputs in accurate cultural and brand-specific sources
- Designed agent-driven commerce workflows integrating **Shopify Admin API** to analyze product performance, inventory levels, and new releases for data-driven content planning
- Reduced manual content planning and drafting workload by **~80–90%** through automated retrieval, generation, and workflow orchestration

Brinqa – Cyber Risk Quantification

Santa Cruz, CA

Software Engineering Co-op

Jan 2026 – Present

- Built a full-stack cyber risk analysis platform integrating large-scale vulnerability and asset data into actionable risk insights
- Developed backend services and REST APIs using FastAPI to score, filter, and aggregate 300K+ vulnerability findings
- Designed data pipelines (Python, Pandas) to clean, normalize, and restructure raw scanner data into asset-centric views for analysis
- Implemented a modular risk scoring engine to prioritize findings based on severity, exposure, and asset context
- Designed and built a React + TypeScript dashboard that improved vulnerability triage workflows, reducing remediation effort by ~40% and enhancing usability through structured, drill-down views

Calpulli Tonalehqueh – Mexica New Year

San Jose, CA

Software Engineering Contract

October 2025 – March 2025

- Built an internal platform to automate vendor onboarding, communication, and booth assignment for a large-scale cultural event
- Reduced volunteer coordination workload by ~70% by replacing manual spreadsheets and messaging with a centralized, automated system
- Streamlined vendor management by organizing registration, confirmations, and onboarding workflows into a structured, trackable process
- Consolidated \$70K+ in vendor payments into a single system using Stripe, improving financial visibility and tracking across the organization
- Improved overall event operations by ensuring vendors were consistently onboarded, informed, and supported leading up to the event

Skills & Interests

Programming Languages: Python, TypeScript, JavaScript (ES6+), SQL, C++, C

Frameworks & Technologies: FastAPI, FastAPI, PostgreSQL, PyMuPDF, LangChain, LangGraph, LlamaIndex, Next.js, Express.js, REST APIs, MongoDB, PostgreSQL, SQLite, Docker, Pandas, NumPy

Software Engineering Practices: Agile/Scrum, API Design, Backend Development, Data Pipelines, System Design, Testing, Debugging

Interests: Psychological Horror Films, House & Acid Techno music, Cheese, Golf, and Graphic Design.