

Frederick Casey-Housand

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Independent AI Contractor | Custom AI systems for businesses: automation, CRM integration, context infrastructure, and data tooling

EDUCATION

B.A. Economics, Minor Environmental Systems & Society — University of California, Los Angeles | 2023 – Dec 2026

GPA: 3.5 | Expected graduation: December 2026

High School Diploma — Bishop O'Dowd High School | 2019 – 2023 | GPA: 4.35 | Class Rank: Top 1%

INDEPENDENT CONTRACTOR — AI SYSTEMS

AI Content & Marketing Systems — ShoplyAI — San Francisco, CA | Mar 2026 – Present

- Building AI-assisted content production pipeline with pillar-cluster SEO architecture and prompt-engineered writing system for Shopify AI chatbot company
- Developing automated keyword research infrastructure and anti-pattern prompt rules for scalable content output
- Architecting agent systems to automate outreach flows and CRM-integrated marketing workflows

Enterprise Context Engine — Larta Institute — Los Angeles, CA | May 2025 – Dec 2025

- Built hybrid AI context solution (RAG + knowledge graph) for enterprise AI pilot serving NOAA and USDA federal research programs
- Optimized semantic chunking to improve precision@k on domain-specific scientific and regulatory terminology
- Constructed full product specifications: competitor analysis, technical feasibility research, and cost modeling
- Co-developed official U.S. government reports for NOAA and USDA incubator program data

AI Marketing Infrastructure — Wheel the World — San Francisco, CA | May 2024 – Jan 2025

- Launched AI-powered MarTech tool improving clickthrough rates by 20%+ and response rates 2x within two weeks of deployment
- Deployed customizable CRM automation within HubSpot with Facebook client funnel integration
- Developed and launched AI Agent using customer data to send personalized outreach through social media
- Built file organization and compression system for ~100GB of company image data; exceeded launch expectations with 100k+ API uses in first month

SELECTED PROJECTS

TinyMacro — Multi-Agent Orchestrator — Independent Development | 2025

- Enterprise-ready multi-agent orchestration system for automating knowledge work with vectorized data traversal and runbook-guided worker agents
- Built with TypeScript, React, AI-SDK, and PGvector; used as base infrastructure for client implementations

AI Image Organization and Smart Search System — Wheel the World | 2024

- Implemented company-wide image database using AWS Rekognition for AI categorization and lossless compression
- Built web portal with Smart Search for marketing and sales teams to navigate 100GB+ image library

CRM Segmentation & Post-Discovery Automation — Wheel the World | 2024

- Built custom client segmentation system that automated personalized engagement sequences triggered by post-discovery call outcomes
- Integrated segmentation pipeline with HubSpot CRM, enabling automated lifecycle tracking and targeted follow-up at scale

Oakland Branch Leader — Tree-Plenish | 2023

- Organized community planting events of 100+ fruit trees; led team of 6 through fundraising, logistics, and legal hurdles
- Nationally recognized for sustainability efforts; recipient of David Brower Conservation Award (1 of 1,500)

ADDITIONAL

Technical Skills: Fullstack development, CRM automation (HubSpot), RAG pipelines, knowledge graphs, semantic chunking, AWS (Rekognition, S3), Google Cloud Console, CRUD apps, data visualization, SEO, technical documentation, feasibility/cost analysis, UX design principles

Languages: JavaScript, TypeScript, Python, SQL, React.js, Next.js, Tailwind CSS, R, AI-SDK

Certifications: Fundamentals of Graphic Design (CalArts) | Google Ads Management (Google Skillshop)

Languages (spoken): English (native) | Spanish (conversational)