

CAMERON HIGHTOWER

512-769-0768 | cameron@hightower-ai.com | [GitHub](#) | [LinkedIn](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

AI Engineer and full-stack/mobile builder with deep experience across Python/FastAPI, React Native, and Next.js. Built multi-agent LLM systems with custom tool orchestration, verification pipelines, and RAG to power wellness and productivity applications. Founded and shipped Juniper (iOS/Android/Web) with 12+ integrations across Oura, Notion, Slack, and productivity suites; implemented smart model switching, semantic/deterministic retrieval, and caching to optimize latency and cost. Previously increased student proficiency by 50% as a math teacher and first-authored peer-reviewed research. Seeking AI Engineer, Founding Engineer, or Full-Stack Software Engineer roles building production-grade agentic applications.

CORE SKILLS

Programming Languages: Python, TypeScript/JavaScript, Kotlin, Swift

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

Backend & APIs: FastAPI, Python

AI/ML & LLMs: Multi-agent orchestration, RAG (retrieval-augmented generation), prompt engineering, embeddings, model switching, LLM verification, GPT/Claude ecosystems

Databases & Storage: Supabase, PostgreSQL, semantic retrieval

Cloud & DevOps: AWS (Elastic Beanstalk, S3), GCP, Azure, Vercel, Docker

Integrations & Tools: Stripe, Oura, Apple Health, Google/Outlook productivity APIs, Notion, Slack, Perplexity

Developer Tools: Cursor AI, Claude Code, Git/GitHub

SELECTED PROJECTS

Founder & Lead AI Engineer — HightowerAI (Juniper), *April 2024 – Present*

Austin, TX | juniperassistant.com | [App Store](#) | [Demos](#) | [Developer Interface](#)

- Designed and shipped Juniper, an AI wellness/productivity assistant on iOS, Android, and Web with 12+ integrations including Oura, Apple Health, Pixel Watch, Fitbit, Notion, Slack, Google/Outlook productivity services, and Perplexity.
- Built multi-agent orchestration system with custom 200+ tool registry, semantic and deterministic retrieval, and intelligent model switching; reduced median response latency by ~35% via request-level data caching and provider system prompt KV caching.
- Implemented non-agent LLM verification steps and hardcoded protocols for added determinism; enhanced reliability and accuracy of task execution across diverse use cases.
- Developed Agents GDI, a custom developer interface for inspecting agent system prompts, thoughts, actions, action results, retrievals, and model switches; streamlined debugging and system observability.
- **Tech Stack:** React Native (TypeScript, Kotlin, Swift), Expo, Python/FastAPI, Supabase, Stripe, Next.js; deployed on Vercel and AWS Elastic Beanstalk.

AI Engineer & Full-Stack Developer — SheetAssist, *October 2024 – March 2025*

Austin, TX

- Built AI web application that performs spreadsheet operations, data entry, and data visualization given natural language commands; integrated with Google Sheets and Microsoft Excel Online.
- Architected agentic verification backend to validate LLM-generated code in a sandboxed environment; ensured accuracy and safety of automated spreadsheet manipulations.

- **Tech Stack:** Next.js, Python/FastAPI, Supabase, GCP/Azure, GPT/Claude, AWS (EB/S3), Vercel, Stripe.

AI Engineer & Developer — ClearPath Learning AI, *January 2024 – September 2024*
Flagstaff, AZ

- Developed AI tutoring application with AI agent-led, curriculum-based question bank grounded sessions; used LLM-based hierarchical classification to dynamically fetch questions from custom 3,500-question database.
- Built custom question database using LLMs and prompt templates to generate targeted, high-quality educational content across multiple subject areas.
- **Tech Stack:** Next.js, Python/FastAPI, Supabase, GCP, Claude, AWS Elastic Beanstalk, Vercel, Stripe.

Developer — Socratic CS Tutor, *October 2023*
Flagstaff, AZ

- Built CS tutor for high school CS students using Streamlit and OpenAI API to provide Socratic-method tutoring and personalized code feedback.

WORK EXPERIENCE

Registrar/Tech Coordinator — Flagstaff Arts and Leadership Academy, *December 2023 – October 2024*
Flagstaff, AZ

- Streamlined school operations by digitizing records, consolidating Google Workspace licenses, establishing employee turnover protocols, and creating comprehensive job guides and descriptions.
- Enhanced communication and operational efficiency by implementing Google Groups for staff coordination, building an internal staff Google Site, and digitizing student registration and records transfer processes.
- Managed school data and addressed state, parent, and student needs with attention to compliance and stakeholder satisfaction.

Teacher & Curriculum Builder — Flagstaff Arts and Leadership Academy, *February 2023 – December 2023*
Flagstaff, AZ

- Designed and delivered curriculum for Quantitative Reasoning with Python/FastAPI and Machine Learning, Calculus, Pre-Calculus, and Algebra 2; integrated project-based learning and real-world applications.

Builder — Construction/Design Projects, *June 2021 – November 2022*

- Converted van to fully functional tiny home with custom carpentry, electrical, and plumbing work; achieved 60% ROI.
- Designed and built custom woodworking projects for clients with emphasis on quality craftsmanship and client satisfaction.

Math Teacher — LPS Oakland R&D High School (Teach for America) *August 2019 – June 2021*
Oakland, CA

- Delivered culturally competent lessons, promoted student agency, and utilized exploration-based curriculum; achieved 50% increase in student grade-level proficiency in second year of teaching.

First Author/Field Researcher/Data Analyst — Vanderbilt Sociology and Urban Planning,
May 2017 – November 2019
Nashville, TN

- Uncovered and analyzed 'Reverse Blockbusting' and 'Predatory Buying' trends in North Nashville through extensive field research and quantitative data analysis.
- First-authored peer-reviewed paper, 'The Raced-Space of Gentrification: Reverse Blockbusting, Home-selling, and Neighborhood Remake in North Nashville,' published in *City and Community* (2019).

EDUCATION

Vanderbilt University, Nashville, TN, *Graduated May 2018*

Bachelor of Engineering (B.E.), Engineering Science — Mechanical Engineering
Concentration

Minors: Computer Science, Engineering Management

Honors: Dean's List

CERTIFICATIONS

DeepLearning.AI — Mathematics for Machine Learning Specialization (2023)

DeepLearning.AI — Machine Learning Specialization (2023)

DeepLearning.AI — Generative AI with Large Language Models (2023)

DeepLearning.AI — Fine-Tuning Large Language Models (2023)

Stanford Online — AI and Public Health (2023)

PUBLICATIONS

Hightower, C., et al. (2019). 'The Raced-Space of Gentrification: Reverse Blockbusting, Home-selling, and Neighborhood Remake in North Nashville.' *City and Community*, 18(3).
First author, peer-reviewed.