Cody Kandarian

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Education

Baylor University, School of Engineering and Computer Science — Waco, TX
Bachelor of Science in Data Science | GPA: 3.6 / 4.0 — *Aug. 2023 – May 2027*

- **Minors:** Mathematics, Business Administration
- **Relevant Coursework:** Data Structures & Algorithms, Machine Learning, Databases, Computer Systems, Cloud Computing

Experience

Software Engineer, Test Reliability (Incoming) — Summer 2026
SpaceX — McGregor Rocket Engine Test Facility — *McGregor, TX*

Co-Founder & CTO — Dec. 2025 – Mar. 2026
Entry (tryentry.ai) — *Remote*

- Shipped production platform to **4,000+ users** by architecting a 4-service, 60,000-line system (Express 5 API, Next.js 16 frontend, Python FastAPI AI service, MCP server for Claude Desktop) on Vercel + Railway
- Kept search online through model outages by building an LLM-powered natural-language query parser (15+ filter types on OpenAI structured output) backed by 2-tier Redis caching, a circuit breaker, and a hard $20/day spend cap
- Designed hybrid semantic search across **80M+ professional contacts** on pgvector + SentenceTransformers (384-dim), combining vector similarity with keyword filters and collaborative-plus-content recommendations

Software Engineering Co-op — May 2025 – Aug. 2025
Keysight Technologies — *Santa Rosa, CA (Remote)*

- Developed open-source Particle Swarm Optimization framework for Keysight ADS that automated RF circuit design previously requiring weeks of manual iteration
- Built 3D Smith tube visualization tool in PyQtGraph for real-time optimization trajectory analysis across **1,000+ data points per frequency**, enabling engineers to debug optimization runs interactively
- Integrated framework with Keysight ADS via file I/O protocols and AEL scripting to enable automated end-to-end simulation workflows

Undergraduate Researcher — June 2025 – Present
Baylor SMART Hub — *Waco, TX*

- Built Dynamic Spectrum Access system providing real-time interference protection for military radar while enabling commercial spectrum sharing in the 3.1–3.45 GHz CBRS band
- Developed Django-based SAS server handling CBRS messaging with real-time geographic interference mapping and spectrum waterfall displays
- Designed scalable system supporting multiple concurrent users across **350 MHz of spectrum** with 1-second update intervals

Projects

Zo | *Python, TypeScript, Swift, Gemma, FastAPI, React* — Apr. 2026

- Built at the YC × Cactus × Google DeepMind Gemma Voice Agents Hackathon: a 24/7 multilingual AI livestream-shopping seller driven by Gemma E4B running on-device via the Cactus runtime, cutting per-seller unit economics from **$9,628/mo (cloud AI) to $144/mo**
- Designed a three-tier pre-rendered MP4 architecture (idle loop + intent-matched bridge clips + Wav2Lip lip-sync overlay on a RunPod 5090) that kept ˜90% of comment responses on-device and escalated only ˜10% to cloud TTS + live lip-sync

SpaceX Daily News Digest | *Python, Claude API, GitHub Actions, BeautifulSoup, Jinja2* — Mar. 2026

- Built AI-powered daily briefing pipeline that scrapes 7+ space-news sources (SpaceNews, NASASpaceflight, Teslarati, Ars Technica) plus curated X/Twitter accounts, synthesizes articles via the Claude API, and auto-publishes a static HTML digest to GitHub Pages
- Automated daily publication via a scheduled GitHub Actions workflow with parallel source fetching, article deduplication, and RSS/Nitter fallback for resilient scraping

Technical Skills

Proficient: Python, TypeScript / JavaScript, SQL
Familiar: C++, R, Swift
Frameworks: Django, FastAPI, Next.js, React, Node.js / Express
Infrastructure: Docker, Git, GitHub Actions, Vercel, Railway, Redis, PostgreSQL / pgvector
AI / LLM: Anthropic Claude API, OpenAI API, MCP (Model Context Protocol), SentenceTransformers
ML & Data: PyTorch, TensorFlow, scikit-learn, NumPy, Pandas, SciPy, Matplotlib, BeautifulSoup, Jinja2, PyQtGraph