Liam Kiernan

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Skills

Languages: Python (Proficient), Java (Proficient), Swift (Proficient), OCaml, C++, SwiftUI, JavaScript, SQL Tools: Git, Supabase, Firebase, LLM Integration, REST API, RAG, Vector DBs, Qdrant, Chrome Ext. Dev, Lottie

Work Experience

Transcendworx	May 2025 - August 2025
Software Engineer and Machine Language Intern	Pittsburgh, PA (remote)
Passion driven project building a RAG for company tackling substance abuse disorder	
• Tuned embedding model, chunking, and RAG strategy to reduce LLM cost by 20% and	
hallucinations considerably (Python, Supabase (SQL), Azure)	
This Life	May 2025 - August 2025
Software Engineer and Growth Intern	New York City, NY
• Fine-tuned iOS app, improved audio compression by 15%; fixed bugs (Swift, SwiftUI)	
• Attracted 2,000+ new users in first month through cold outreach + social media campaign	
Keye (YC F24)	May 2024 - August 2024
Software Engineer Intern	New York City, NY (remote)
 Joined test automation team, then transitioned to backend development for LLM RAG 	
analyzing PE data (Python)	
Cleaned and prepared raw data for testing and training	
Pittsburgh Steelers	May 2024 - August 2024
Software Engineer Intern	Pittsburgh, PA
Built 2 internal mobile apps to improve communication and staffing workflows for Acrisure	
Stadium events (Swift, Firebase)	

Projects

Ragged

- Designed and built an evaluation-first RAG config tuner that finds pareto-optimal chunk size, overlap, and embedding model
- Benchmarked OpenAI, BGE, and HuggingFace embeddings using Recall@k and GPT-4 eval (Python, LangChain, Qdrant)

Inferfleet

- Built a self-hosted LLM routing engine that selects models by latency, cost, and logic constraints
- Runs with vLLM engine and REST APIs; supports user-defined routing (Python, JavaScript)

Scout

- Built app recommending movies/books/podcasts using OpenAI and scraped user profile data (Letterboxd, Goodreads)
- Full-stack implementation on Supabase backend with React frontend (JavaScript, SQL)

Education

University of Pennsylvania (Bachelors)

Double Major: Computer Science and Economics

August 2022 - May 2026

Coursework: Computer Programming & Computer Systems, Micro and Macroeconomics, Statistics, Big Data **Activities**: President of St. Anthony Hall Fraternity and Literary Society