

Nicholas Faylor

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SKILLS

Technologies: Java, Python, JavaScript, TypeScript, SpringBoot, Next.js, React, HTML, CSS, SQL, PostgreSQL, Docker, LangChain, REST APIs, AWS (Athena, Bedrock, IAM, S3)

AI Engineering: LLM prompt optimization, agentic workflow design, semantic search & embeddings, RAG systems, Vector Databases, MCP, conversational AI

Tools: GitHub, Git, VSCode, IntelliJ, Claude Code

EDUCATION

B.S. Software Engineering - San Jose State University

[August 2021 – December 2025]

GPA: 3.6 - **Cum Laude**

- **Relevant Coursework:** Data Structures and Algorithms, Database Management Systems, Intro to AI, Object Oriented Design, Operating Systems, Computer Organization and Architecture, Software Defined Networks, Computer Networks

EXPERIENCE

Virsec - OTTOGUARD.AI | *Software Engineering Intern*

[June 2025 – September 2025]

- Engineered an **interactive chat-driven onboarding agent** that guides users through tenant setup workflows via natural language, integrating a specialized toolkit for **data integration configuration**, **MCP server provisioning**, and other onboarding features.
- Implemented **enterprise vulnerability management integrations** (Qualys, Rapid7) into the core platform, establishing organization infrastructure and enabling connector deployment for customer organizations.
- Architected an **LLM evaluation framework** to benchmark multiple language models against standardized question banks, implementing automated grading with **LLM judges** to ensure AI agent reliability and optimize model selection for production use.

Headstarter AI Fellowship | *Software Engineering Fellow*

[July 2024 – September 2024]

- Developed **3+** AI applications utilizing **Next.js**, **OpenAI**, **Pinecone**, and **LangChain**, with a strong emphasis on implementing Retrieval-Augmented Generation (**RAG**) techniques.
- Participated in a fast-paced, iterative development process, from conceptualization to full application deployment with **200+** site visitors, prioritizing user feedback and rapid prototyping.

PROJECTS (available at <https://github.com/nickfaylor>)

Termometer: A powerful word association game where users attempt to guess a hidden word based on a calculated similarity score from the user's guessed word, and the hidden word. Visit at: **termometer.app**

- Created with **Next.js**, **Neon**, **OpenAI** and **LangChain**.
- Uses an embedding model to create vector representations of English words based on semantics and meaning.

FlashNote: An AI powered flashcard generation application through the upload of user's PDF/PPTX files.

- Built with **Next.js** connected with **Firebase** firestore and **Clerk** user authentication.
- Utilizes **LangChain** and **OpenAI** embeddings to create vector embeddings with chunked data.
- Uses **Pinecone** to store vector embeddings for augmented data storage and enhanced querying based on provided topic for flashcard generation.