

SUMMARY

Computer Science undergraduate and Software Engineer with early-career experience in AI application development, full-stack engineering, and startup operations.

Brings technical fluency across full-stack frameworks and hands-on experience implementing agentic AI workflows and retrieval-augmented pipelines for production systems.

Recognized for initiative and adaptability in fast-moving, ambiguous environments, with a track record of delivering results across enterprise and startup ecosystems.

TECHNICAL STACK

- **Languages:** C, C++, Python, SQL, JavaScript (Node.js, React)
- **AI/ML:** LangChain/LangGraph (agentic workflows), RAG (vector search, knowledge graphs)
- **Backend:** FastAPI, Node.js
- **Databases:** MongoDB, SQL
- **Frontend:** React, TailwindCSS
- **Infra:** Google Cloud Platform (GCP)

INTERESTS

- Avid runner; former aspiring architect ([art portfolio](#))

EDUCATION

University of Illinois Urbana-Champaign (UIUC)
B.S. Computer Science | GPA: 3.9/4.0 | May 2027

Relevant Coursework: Data Structures, Database Systems, Artificial Intelligence, Systems Programming, Computer Architecture

WORK EXPERIENCE

AI Application Development Intern

Kakao Entertainment – Seoul, South Korea | Aug 2025 – Present (ending Jan 2026)

Worked on powering cross-agent intelligence and organizational knowledge integration across Kakao’s ecosystem.

- Engineered **event-driven ingestion pipelines** for Kakao's **enterprise Knowledge Graph**, successfully integrating **two core business APIs** (the internal collaboration platform and the Corporate Services & Directory), with **two additional platform APIs** (Jira, Confluence) in progress. The unified graph scales to **100 K+ Entities** and **800 K+ Relationships**, powered by a **MongoDB + AlloyDB (pgvector)** stack that enables low-latency semantic search across enterprise data.
- Re-architected multi-API retrieval flow using the Knowledge Graph, cutting query latency by **3x (1.5s → 0.5s)** by consolidating cross-system queries with a single graph traversal.
- Implemented the **MCP (Model Context Protocol) orchestration layer** exposing Knowledge Graph capabilities through **11+ LLM-based tools**, enabling cross-platform semantic search and summarization for **1K+ employees**.

Chief of Staff Intern

NXN Labs – Seoul, South Korea | Oct 2024 – Feb 2025

Interned at an early-stage startup founded by Stanford engineers innovating in generative AI for on-model imagery and virtual try-on, expanding into U.S. retail and fashion-tech markets.

- Partnered directly with the CEO to establish NXN Labs' U.S. parent company via Delaware flip, managing entity formation, cap table restructuring, and stock option plans.
- Refined investor and retail pitch decks, strengthening narrative positioning for U.S. market entry.
- Conducted structured QA on 10K+ AI-generated images, identifying failure patterns that improved model accuracy and visual fidelity for client campaigns.
- Launched company's first U.S. internship program, defining roles and supporting recruitment that resulted in 6 hires.

SELECT PROJECT EXPERIENCE

- **MindFlow** – Conceived and deployed an interactive task management platform replacing static lists with a graph-based UI (React, TypeScript, D3.js, Firebase real-time sync). Enhanced productivity workflows by implementing advanced features such as auto-rollover tasks, date-based navigation, and priority tagging, with live deployment at usemindflow.app.
- **BookBridge** – Architected a full-stack web application (Node.js, Express, MySQL, GCP) enabling peer-to-peer book discovery. Optimized backend performance by designing normalized schemas with foreign keys, indexes, stored procedures, and triggers, ensuring scalable data integrity and query efficiency.