Jay Jo

Software & AI Application Development | Computer Science

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.jsDatabases: MongoDB, SQL
- Frontend: React, TailwindCSS

INTERESTS

 Avid runner; former aspiring architect (<u>art portfolio</u>) Mobile: (+1) 217-637-3409 Email: jaywoojo@gmail.com LinkedIn: /in/jaywoojo Github: /jaywoojo Personal Website: jaywoojo.com

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)

About: Innovative leader in digital music and entertainment services, powering platforms such as Melon with advanced AI-driven personalization.

- Designed ingestion pipelines with both scheduled and event-driven mechanisms, consolidating internal communication and documentation data into a knowledge graph that was deployed to production within Kakao's internal AI platform.
- Implemented orchestration logic across MCP servers and retrieval pipelines, enabling the AI platform to deliver summaries, semantic discovery, and contextual insights for 1,000+ employees.

Chief of Staff Intern

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

About: 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 in establishing NXN Labs' U.S. parent company, managing Delaware flip restructuring (entity setup, cap table, stock options) and aligning complex legal, financial, and operational processes.
- Reviewed CEO pitch decks for investors and retail clients, strengthening narrative clarity and alignment with U.S. market positioning.
- Conducted structured QA on thousands of AI-generated images, delivering actionable insights that engineers leveraged to increase model accuracy and visual fidelity, directly strengthening client campaign outcomes.
- Launched the first internship program for U.S. students, shaping position definitions and supporting CEO-led recruitment efforts 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.