

Jaehyup Shin

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PROFESSIONAL SUMMARY

Software engineer with 6+ years building production C++/Linux and distributed video systems. Now pursuing an M.S. in Artificial Intelligence and applying that foundation to RAG, collaborative agents, and developer tools through hands-on projects and teaching.

EDUCATION

Santa Clara University | M.S. in Artificial Intelligence

Expected Jun 2028

Hongik University | B.S. in Computer Engineering, GPA 3.85/4.50

Feb 2020

PROFESSIONAL EXPERIENCE

Hanwha Vision | Software Engineering

Jan 2020 – Mar 2026

Research Engineer (2020–2024) → Senior Research Engineer (2024–2026) | Seongnam, South Korea

- Designed the C++/Qt 6/QML architecture for a distributed video management platform supporting thousands of camera and server connections.
- Owned the Ubuntu build of WiseNet Viewer, maintaining consistent behavior across Linux, Windows, and macOS.
- Introduced Docker-based cross-compilation environments for embedded SoC platforms, improving build reproducibility across toolchains.
- Integrated intelligent video event workflows, including motion/IVA events and interactive detection regions, into the VMS client.
- Served as Git Administrator, established branching and code-review practices, and partnered with global teams to resolve field issues.

SELECTED PROJECTS

RippleBrain | Enterprise AI hackathon MVP

Built a Python/FastAPI RAG prototype that traces policy changes across teams and documents, flags contract exceptions, and drafts actions for human approval.

CardGuard | Flower Collaborative Agent Hackathon · Team project

Co-developed a Python/Flower payment-risk prototype combining federated learning, privacy-safe agent coordination, rule-based decisions, and human review.

vibe-pro | Open-source AI developer tooling

Created a Claude Code plugin with skills for code review, architecture, security, and fault-tolerant AI-assisted development.

ONVIF Professional | Open-source Claude Code plugin

Created an ONVIF-focused Claude Code plugin with profile/spec lookups, HTTP/SOAP/RTSP diagnostics, SOAP templates, and system-design guidance for IP video systems.

BridgeToCampus | Google Stitch Challenge · Web prototype

Built a working 90-day transition-planning experience for international students, from AI-assisted interface design to implementation.

TEACHING EXPERIENCE

CodeBridge | Technical Instructor

2024 – Present

Developed and taught practical courses on AI agent harnesses, RAG, and software engineering to 2,000+ students.

Tech: AI Agents, RAG, Machine Learning, Python, FastAPI | C/C++, Linux, Docker, Qt/QML, Git | JavaScript, SQL