

Junwon Seo

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Undergraduate Student at Seoul National University

[github](#) | [linkedIn](#) | [homepage](#)

PROFILE

I am interested in LLM agents for automated research, particularly how they maintain and update state and make sequential decisions over long-horizon tasks. My current research focuses on agentic retrieval and dynamic retriever routing.

EDUCATION

Seoul National University

B.S. in Civil & Environmental Engineering

Interdisciplinary Major in Artificial Intelligence

Seoul, Korea

Mar 2024 – Present

- Relevant Coursework: Machine Learning Fundamentals, Deep Learning Fundamentals
Data Structures & Algorithms, ML Math & Programming Practice

PROJECTS

Research Loop

[Link](#)

Auditable autonomous experimentation plugin

- Developed a Codex/Claude Code plugin and deterministic Python runner that extends open-source agent-skill scaffolding into approved execution and evaluation contracts
- Enforced Git-worktree isolation, plan-hash approval, metric validation, experiment budgets, and append-only research ledgers

Margin

[Link](#)

Local-first research paper companion

- Built an Electron app for PDF ingestion, figure/table review, evidence-linked Markdown notes, and local SQLite persistence
- Integrated Codex App Server for AI-assisted note organization while preserving local papers and user-confirmed notes as the source of truth

Agent Skill Hub

[Link](#)

Local skill inventory and diagnostics app

- Built a local web app that inventories and deduplicates skills across 59 AI coding-agent platform definitions, with search, filters, exports, and snapshot diffs
- Implemented H001–H015 diagnostics, conservative path and symlink boundaries, safe prompt generation, and a 157-test verification suite

InteriAI

[Link](#)

Planning & Development — AI-powered interior design product

- Built and deployed an AI web product that transforms room photos into multiple interior design styles through a prompt-driven image-generation workflow
- Implemented Google OAuth, credit-based SaaS usage, Korean/English multilingual support, and production deployment on Vercel

SKILLS

Languages: Python, JavaScript/TypeScript

Frameworks: Next.js, React, Tailwind CSS

AI/ML: LLM agents, information retrieval, tool-use systems, LLM evaluation

Tools: OpenAI API, Open WebUI, Git, Vercel

OPEN SOURCE CONTRIBUTIONS

OpenHuman

[Link](#)

Open-source contributor — Rust, React, TypeScript

- Implemented Codex OAuth provider support across the Rust core and React settings interface, including credential import, Responses API routing, cross-platform fallbacks, model-catalog normalization, and regression tests ([PR #2748](#))
- Fixed OAuth model discovery with tested client-version resolution across environment overrides, Codex caches, version metadata, and fallback behavior ([PR #3414](#))
- **Hermes WebUI** — Fixed session-history filtering and added controls for retained messaging sessions ([PR #2286](#), [PR #2294](#))
- **OpenClaw** — Fixed a Windows file-identity check that caused Control UI 404 responses ([PR #24939](#))

ACTIVITIES

- **Kakao AI Top100 Finalist** — Designed AI harnesses for prompt engineering, output verification, and practical LLM application workflows

RESEARCH EXPERIENCE

LDI Lab, Seoul National University

Seoul, Korea

Undergraduate Research Intern

Jun 2026 – Present

Research Mentor: [Dohyeon Lee](#)

- Investigating adaptive retriever selection for reasoning-intensive retrieval.

Smart Construction Lab, Seoul National University

Seoul, Korea

Undergraduate Research Intern

Dec 2025 – Feb 2026

Advisor: Prof. Youngjib Ham

- Designed state representations and action spaces for RL-based control of excavators and vibratory rollers, informed by literature analysis and practical constraints.

AWARDS

1st Place, KRAFTON Track — Cofathon: AI Native Battlegrounds

Jul 2026

KRAFTON & CJ Olive Young

- Completed an AI-native forward-deployed engineering task that required discovering the problem through interviews with a field manager and shipping a working demo within the event
- Built AFTERMATCH, a post-match interview practice web app for PUBG Esports players that coaches only player-confirmed Korean transcripts, with schema-validated LLM feedback, one practice goal per retry, and manual-input fallback when speech recognition fails

Academic Excellence Scholarship

2025 Spring, 2025 Fall

Seoul National University