Juyong Lee

Email | Google Scholar | GitHub | LinkedIn

Intro

I am a Ph.D.(/M.S. integrated course; 3rd year) student, advised by **Kimin Lee**. My main research interest is to build **capable and reliable AI agents**, currently focusing on digital tasks (e.g., web tasks). I develop algorithms to improve the abilities of RL/LLM agents (e.g., learning representation for visual robustness [C1] and efficient contextualization [C4]) and design evaluation systems (e.g., generalization [C5] and safety [C6]).

Keywords: Representation Learning, Reinforcement Learning, LLM Agent, Evaluation, AI Alignment

Education

Korea Advanced Institute of Science & Technology (KAIST) Ph.D.(/M.S.), Kim Jaechul Graduate School of AI
Stanford University International Honors Program
Pohang University of Science and Technology (POSTECH) B.S., Mathematics & Computer Science (double major)
Daegu Science High School for Gifted

Work Experience

Research Engineer (Contractor via YunoJuno) - **Google DeepMind** (2025 - 2026)
Sergeant - **Republic of Korea Army** (2019 - 2020)

Publication

(*: equal contribution, C: Conference, P: Preprint)

[P2] Toward Self-Evolving Systems of LLM Agents through Exploration and Iterative Feedback
Y. Yang*, S. Kang*, **J. Lee**, D. Lee, S. Yun, K. Lee; under-review

[P1] Holistic Agent Leaderboard: The Missing Infrastructure for AI Agent Evaluation
S. Kapoor*, B. Stroebl*, ..., **J. Lee**, ..., P. Liang, A. Narayanan; under-review

[C7] State Your Intention to Steer Your Attention: An AI Assistant for Intentional Digital Living
J. Choi, **J. Lee**, J. Kim, C. Kim, T. Min, W. B. Knox*, M. K. Lee*, K. Lee*; CHI 2026

[C6] MobileSafetyBench: Evaluating Safety of Autonomous Agents in Mobile Device Control
J. Lee*, D. Hahm*, J. Choi*, W. B. Knox, K. Lee; AAAI 2026 (AI Alignment Track)

[C5] Benchmarking Mobile Device Control Agents across Diverse Configurations
J. Lee, T. Min, M. An, D. Hahm, H. Lee, C. Kim, K. Lee; CoLLAs 2025

[C4] Learning to Contextualize Web Pages for Enhanced Decision Making by LLM Agents
D. Lee*, **J. Lee***, K. Kim, J. Tack, J. Shin, Y. W. Teh, K. Lee; ICLR 2025

[C3] Hyperbolic VAE via Latent Gaussian Distributions
S. Cho, **J. Lee**, D. Kim; NeurIPS 2023

[C2] A Rotated Hyperbolic Wrapped Normal Distribution for Hierarchical Representation Learning
S. Cho, **J. Lee**, J. Park, D. Kim; NeurIPS 2022

[C1] Style-Agnostic Reinforcement Learning
J. Lee*, S. Ahn*, J. Park; ECCV 2022

Talk

Google DeepMind Montreal (2025)
Hyundai Motor Group Tech Summit (2024)
ICLR Workshop on Generative Models for Decision Making (Spotlight Presentation; 2024)
AI EXPO KOREA (2024)

Service

Reviewer - ICLR 2025, TAG-DS 2025, AAAI 2026, ICLR 2026

Skills

Mathematics for AI (proficient), Python (proficient), PyTorch (proficient), JAX (basic), Kotlin (basic), English (fluent)