Juyong Lee

Email | Google Scholar | GitHub | LinkedIn

Intro

I am a Ph.D.(/M.S. integrated course; 3rd year) student, being advised by **Kimin Lee**. My main research interest is **autonomous replication and adaptation**. To this end, I study complex sequential decision making, such as by developing efficient algorithms for RL/LLM agents in open-ended environments (e.g., computer use) and designing new benchmarks (e.g., generalization and safety/alignment evaluation in digital device control).

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

Education

Korea Advanced Institute of Science & Technology (KAIST) Ph.D.(/M.S. int.), 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

Work Experience

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

Publication

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

[P5] **Holistic Agent Leaderboard: The Missing Infrastructure for AI Agent Evaluation**
S. Kapoor*, B. Stroebl*, ..., **J. Lee**, ..., P. Liang, A. Narayanan; under-review

[P4] **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; under-review

[P3] **Automated Skill Discovery for Language Agents through Exploration and terative Feedback**
Y. Yang*, S. Kang*, **J. Lee**, D. Lee, S. Yoon, K. Lee; under-review

[P2] **MobileSafetyBench: Evaluating Safety of Autonomous Agents in Mobile Device Control**
J. Lee*, D. Hahm*, J. Choi*, W. B. Knox, K. Lee; under-review

[C5] **Benchmarking Mobile Device Control Agents across Diverse Configurations**
J. Lee, T. Min, M. An, 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

[P1] **Unsupervised Reinforcement Learning with Foundation Models as Teachers**
T. Nam*, **J Lee***, J. Zhang, S. Hwang, J. Lim, K. Pertsch; NeurIPS 2023'W: ALOE

[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

[J1] **A 3D Cell Printed Muscle Construct with Tissue-Derived Bioink for the reatment of Volumetric Muscle Loss**
Y. Choi, ..., **J. Lee**, ..., J. Rhie, D. Cho; Biomaterials 2019

Talk

Tech summit, Hyundai motor group (2024)
Mentor open seminar, Upstage-Naver Partnership for BoostCamp AI Tech Program (2024)
Spotlight presentation, ICLR Workshop on Generative Models for Decision Making (2024)
Technology presentation, AI EXPO KOREA (2024)

Service

Reviewer - ICLR 2025, NeurIPS 2025'W: NeuReps, TAG-DS 2025, AAAI 2026, ICLR 2026

Skills

Mathematics for AI (proficient), PyTorch (proficient), Python (proficient), C++ (intermediate), English (fluent)