SUNGJAE AHN

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Research Interest

I believe that achieving Artificial General Intelligence (AGI) requires learning paradigms that enable agents to adapt and improve through autonomous experience, much like **Reinforcement Learning**. In this context, my primary research interest lies in developing frameworks where agents can autonomously define and tune their own **Intrinsic rewards** to solve tasks with sparse rewards without relying on human prior knowledge.

Education

Kyung Hee University (KHU) Expected Graduation: Feb. 2027
B.S. in Computer Science and Engineering
GPA : 4.029/4.3 (4.28/4.5)

Research Experience

AI & Robotics Lab (AIR Lab), KHU Dec. 2025 – Present
Undergraduate Research Intern (Advisor: Prof. Hyoseok Hwang)
Research Topic : Control policy fluctuation in Deep RL

Publications

(*In Preparation*) "Confidence-Aware Temporal Smoothing in Off-Policy Reinforcement Learning"
SungJae Ahn and HyoSeok Hwang†

Activities

CSE 304 Algorithms Spring, Fall 2025
SW-mentor at KHU

KHUDA (KHU Data analysis and AI club) 7th Jan. 2025 - Jul. 2025
NLP Track, Developed RAG-based Chatbot

Signal Intelligence Feb. 2022 - Nov. 2023
Mandatory Military Service

Skills

AI/ML : PyTorch, Gymnasium
English : TOEIC 970

Awards

Academic Excellence Scholarship, KHU Fall 2025
Academic Excellence Scholarship, KHU Spring 2025
Academic Excellence Scholarship, KHU Fall 2024
Academic Excellence Scholarship, KHU Spring 2024

Projects

Deepfake Detection Competition Fall 2025
- Ranked 33 out of 266 teams utilizing Dual Data Alignment for robust cross-domain forgery detection.
- Leveraged Hydra and WandB to manage experimental configurations and ensure research reproducibility.