

JAEKYEOM KIM

<https://jaekyeom.github.io> ◇ jaekyeom@vision.snu.ac.kr ◇ +1 (734) 320-7282, +82-10-8949-1531

RESEARCH INTERESTS

Deep reinforcement learning: discovery and abstraction of behaviors at scale and generalization of learned behaviors to new tasks or domains.

EDUCATION

Seoul National University *Mar. 2018 - Aug. 2023*
Integrated MS/PhD in Computer Science and Engineering (Expected graduation: Aug. 2023)
Vision & Learning Lab (Advisor: Prof. Gunhee Kim and Prof. Hyun Oh Song)

Korea Advanced Institute of Science and Technology *Feb. 2010 - Jun. 2017*
Bachelor of Science in Computer Science GPA (Overall): 4.06/4.30
Graduated *summa cum laude* GPA (Major): 4.21/4.30

WORK EXPERIENCE

LG AI Research, Ann Arbor *Aug. 2023 - Present*
Postdoctoral Researcher

ESTsoft, Seoul (Alternative Military Service) *Apr. 2013 - May 2016*
Senior Software Engineer

- Developed the dual-engine web browser based on Chromium, a large-scale open source project that powers Google Chrome and more

Google, Seoul *Jun. 2012 - Sep. 2012*
Software Engineering Intern

- Worked on processing raw text data to generate formalized entries and reconciling them with existing entries, as part of the Knowledge Graph project

PUBLICATIONS

(*equal contribution)

Constrained GPI for Zero-Shot Transfer in Reinforcement Learning

Jaekyeom Kim, Seohong Park, Gunhee Kim

- **NeurIPS 2022**

Lipschitz-constrained Unsupervised Skill Discovery

Seohong Park, Jongwook Choi*, **Jaekyeom Kim***, Honglak Lee, Gunhee Kim

- **ICLR 2022**

Time Discretization-Invariant Safe Action Repetition for Policy Gradient Methods

Seohong Park, **Jaekyeom Kim**, Gunhee Kim

- **NeurIPS 2021**

Unsupervised Skill Discovery with Bottleneck Option Learning

Jaekyeom Kim*, Seohong Park*, Gunhee Kim

· **ICML 2021**

Drop-Bottleneck: Learning Discrete Compressed Representation for Noise-Robust Exploration

Jaekyeom Kim, Minjung Kim, Dongyeon Woo, Gunhee Kim

· **ICLR 2021**

Model-Agnostic Boundary-Adversarial Sampling for Test-Time Generalization in Few-Shot Learning

Jaekyeom Kim, Hyungseok Kim, Gunhee Kim

· **ECCV 2020 (Oral: 104/5025 \approx 2%)**

EMI: Exploration with Mutual Information

Hyungseok Kim*, **Jaekyeom Kim***, Yeonwoo Jeong, Sergey Levine, Hyun Oh Song

· **ICML 2019 (Long talk: 158/3424 \approx 4.6%)**

HONORS & AWARDS

Star Student Researcher Award

Feb. 2023

Brain Korea (BK21) FOUR Intelligence Computing, Seoul National University

Youlchon AI Star Fellowship

Jul. 2022

Youlchon Foundation

Naver PhD Fellowship

Dec. 2021

Naver

Google PhD Fellowship

Sep. 2021

Google

· Area: Machine Learning

Samsung Humantech Paper Award

Feb. 2021

Samsung Electronics

· Silver Prize in Signal Processing, award for research work

Qualcomm Innovation Fellowship Korea

Dec. 2020

Qualcomm AI Research

· Award for research work

On-Dream Outstanding Scholar Award

Dec. 2020

Hyundai Motor Chung Mong-Koo Foundation

On-Dream Future Talent Graduate Scholarship

Jul. 2020 - Jul. 2021

Hyundai Motor Chung Mong-Koo Foundation

· Full-tuition and additional scholarships for graduate study

Kwanjeong Domestic Scholarship*Apr. 2018 - Mar. 2020**Kwanjeong Educational Foundation*

- Full-tuition and additional scholarships for 2 years

Summa Cum Laude Honor*Feb. 2018**Korea Advanced Institute of Science and Technology***National Presidential Science Scholarship***Feb. 2010 - Jun. 2017**Korea Student Aid Foundation*

- Full-tuition and additional scholarships for undergraduate study

KAIST Convergence AMP Scholarship*Oct. 2016**Korea Advanced Institute of Science and Technology*

- Merit-based scholarship awarded to 5 recipients

ACADEMIC ACTIVITIES

Conference Reviewer

- ICML (2021, 2022, 2023), NeurIPS (2021, 2022, 2023), ICLR (2022, 2023)

Teaching Assistant at Seoul National University

- Probabilistic Graphical Models (M1522.001300), Spring, 2022
- Statistical Foundations for A.I. and Machine Learning (M2480.000500), Fall, 2021
- Theory and Lab of IoT, AI, and Big Data (M2177.004900), Spring, 2021
- Probabilistic Graphical Models (M1522.001300), Spring, 2020
- Introduction to Deep Learning (M2177.004300), Spring, 2019
- Engineering Mathematics 2 (033.015), Fall, 2018
- Introduction to Deep Learning (M2177.004300), Spring, 2018