JAEKYEOM KIM

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RESEARCH INTERESTS

· Better robustness and adaptability to new data or tasks, largely in deep reinforcement learning (RL)

· Representation learning and information-theoretic approaches in deep RL

EDUCATION

Seoul National University   *Mar. 2018 - Present*
Integrated MS/PhD in Computer Science and Engineering (Expected graduation: 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

PUBLICATIONS

(*equal contribution)

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, Hyoungseok Kim, Gunhee Kim

· **ECCV 2020 (Oral: 104/5025 ≈ 2%)**

EMI: Exploration with Mutual Information

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

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

HONORS & AWARDS

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

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

Code Sprint 2015 *Jul. 2015*
SK Planet
· **R2 - 3rd Place**: Made predictions on customers' future VOD purchases given their past purchase lists
· **R1 - Special Award**: Wrote algorithms for Robocode agents
· Only competitor who won prizes in both of the competitions

ITCSC-INC 2012 Winter School *Jan. 2012*
Chinese University of Hong Kong
· One of 2 Korean and 48 other Asian students chosen and invited

ACADEMIC ACTIVITIES

Conference Reviewer
· ICML (2021, 2022), NeurIPS (2021, 2022), ICLR (2022)

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

WORK EXPERIENCE

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