JAEKYEOM KIM

https://jaekyeom.github.io ◇ CV (PDF) ◇ jaekyeom@snu.ac.kr ◇ (+82) 10-8949-1531

RESEARCH INTERESTS

· Better robustness to new inputs or domains, largely in reinforcement learning (RL)

· Representation learning and Information-theoretic approaches in RL

EDUCATION

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

Incheon Science High School *Mar. 2008 - Feb. 2010*

PUBLICATIONS

Unsupervised Skill Discovery with Bottleneck Option Learning

Jaekyeom Kim*, Seohong Park*, Gunhee Kim

(*equal contribution)

· **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

(*equal contribution)

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

HONORS & AWARDS

Google PhD Fellowship *Sep. 2021*
Google

· Machine Learning

Samsung Humantech Paper Award *Feb. 2021*
Samsung Electronics

· Silver Prize in Signal Processing, one-time award for research work

Qualcomm Innovation Fellowship Korea *Dec. 2020*
Qualcomm AI Research

· One-time 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), NeurIPS (2021), ICLR (2022)

Teaching Assistant at Seoul National University

· 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