

Dong Hoon Lee

CONTACT INFORMATION	Korea Advanced Institute of Science and Technology (KAIST), Kim Jaechul Graduate School of AI 291 Daehak-ro, Yuseong-gu, Daejeon 34141 Republic of Korea	Phone: +82-010-9741-9959 Email: donghoonlee@kaist.ac.kr Github: https://github.com/movinghoon
RESEARCH INTERESTS	Multi-modal learning; Self-supervised learning; Representation learning (Past) Few-shot learning; Reinforcement learning; Imitation learning	
EDUCATION	Ph.D. Candidate , Kim Jaechul Graduate School of AI <i>March 2018 to present</i> Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea M.S. , Electrical Engineering <i>February 2018</i> Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea B.S. , Electrical Engineering <i>February 2016</i> Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea Korea Science Academy , Busan, Republic of Korea <i>February 2012</i>	
HONORS	Korea Government Fellowship <i>March 2012 to present</i> Qualcomm Innovation Fellowship, 2021 South Korea Finalist <i>2021</i> NeurIPS 2022 Scholar Award <i>2022</i>	
EXPERIENCE	Research Intern, LG AI Research, Seoul, Korea <i>April 2022 to October 2022</i>	
PUBLICATION	<ul style="list-style-type: none">[1] Dong Hoon Lee, Sungik Choi, Hyunwoo Kim, and Sae-Young Chung, “<i>Unsupervised Visual Representation Learning via Mutual Information Regularized Assignment</i>”, in Neural Information Processing Systems (NeurIPS), 2022.[2] Dong Hoon Lee and Sae-Young Chung, “<i>Unsupervised Embedding Adaptation via Early-Stage Feature Reconstruction for Few-Shot Classification</i>”, in International Conference on Machine Learning (ICML) 2021[3] Dong Hoon Lee and Song Chong, “<i>Learning based Utility Maximization for Multi-resource Management</i>”, International Conference on Future Internet Technologies (CFI) 2018	
PATENTS	<ul style="list-style-type: none">[1] Song Chong, Yeongjin Kim, Jeongho Kwak, Dong Hoon Lee, “<i>Hybrid Content Caching Method and System</i>”, Nov. 2016.	
PROJECT EXPERIENCE	Scalable representation construction by self-supervision without prior task experience National Research Foundation of Korea (NRF) <i>March 2021 to April 2022</i> Pre-prediction Modeling for autonomous network operation Ministry of Science, ICT and Future Planning <i>April 2017 to August 2018</i> Versatile Network System Architecture for Multi-dimensional Diversity Ministry of Science, ICT and Future Planning <i>April 2016 to November 2017</i>	
TEACHING EXPERIENCE	Teaching Assistant (KAIST) <i>Fall 2016 to Fall 2020</i> <ul style="list-style-type: none">• EE807 Special Topics in EE: Mathematical Foundation of Reinforcement Learning• EE807 Special Topics in EE: Deep Reinforcement Learning and AlphaGo	

- EE405 Electronics Design Lab: Robocam/Network of Smart Things
- EE210 Probability and Introductory Random Process

PROGRAMMING
LANGUAGES

Python (PyTorch/TensorFlow)

- Unsupervised representation adaptation algorithm for few-shot image classification
as a part of “*Unsupervised Embedding Adaptation via Early-Stage Feature Reconstruction for Few-Shot Classification*”
- Reinforcement learning (DQN/A3C) based network resource scheduler
as a part of “*Pre-prediction Modeling for autonomous network operation*” project
and “*Learning based Utility Maximization for Multi-resource Management*”.

LANGUAGES

Korean, English