

## Dong Hoon Lee

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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	<b>Phone:</b> +82-010-9741-9959 <b>Email:</b> donghoonlee@kaist.ac.kr <b>Github:</b> <a href="https://github.com/movinghoon">https://github.com/movinghoon</a>
RESEARCH INTERESTS	Multi-modal learning; Self-supervised learning; Representation learning (Past) Few-shot learning; Reinforcement learning; Imitation learning	
EDUCATION	<b>Ph.D. Candidate</b> , Kim Jaechul Graduate School of AI <i>March 2018 to present</i> Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea <b>M.S.</b> , Electrical Engineering <i>February 2018</i> Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea <b>B.S.</b> , Electrical Engineering <i>February 2016</i> Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea <b>Korea Science Academy</b> , 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"><li>[1] <b>Dong Hoon Lee</b> and Seunghoon Hong, “<i>Learning to Merge Tokens via Decoupled Embedding for Efficient Vision Transformers</i>”, in Neural Information Processing Systems (NeurIPS), 2024.</li><li>[2] <b>Dong Hoon Lee</b>, 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.</li><li>[3] <b>Dong Hoon Lee</b> 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</li><li>[4] <b>Dong Hoon Lee</b> and Song Chong, “<i>Learning based Utility Maximization for Multi-resource Management</i>”, International Conference on Future Internet Technologies (CFI) 2018</li></ul>	
PATENTS	<ul style="list-style-type: none"><li>[1] Song Chong, Yeongjin Kim, Jeongho Kwak, <b>Dong Hoon Lee</b>, “<i>Hybrid Content Caching Method and System</i>”, Nov. 2016.</li></ul>	
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)**

*Fall 2016 to Fall 2020*

- 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