

#### ROBOTICS RESEARCHER

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### **Education**

#### **SNU (Seoul National University)**

Seoul, Korea

Ph.D. in Mechanical & Aerospace Engineering

September. 2021 - February. 2025

• Dissertation: "Autonomous Robot Learning with Minimal Intervention."

Seoul, Korea

**SNU (Seoul National University)** 

M.S. IN MECHANICAL & AEROSPACE ENGINEERING

September. 2019 - Aug. 2021

• Thesis topic: "Dual-arm Manipulation Using Hierarchical Reinforcement Learning."

SNU (Seoul National University)

B.S. IN MECHANICAL & AEROSPACE ENGINEERING

Seoul, Korea

• Thesis topic: "Dynamic Obstacle Removal in ORB-SLAM2 via CNN-based Object Detection."

Mar. 2013 - Aug. 2019

# **Experience**

### **Georgia Institute of Technology**

Atlanta, USA

POSTDOCTORAL RESEARCHER

September. 2025 - Present

• Research topics: "Robotics, Deep Reinforcement Learning, Generative Model."

#### **Artificial Intelligence Institute of Seoul National University (AIIS)**

Seoul, Korea

POSTDOCTORAL RESEARCHER

March. 2025 - August. 2025

• Research topics: "Robotics, Deep Reinforcement Learning, Generative Model."

## **Publication**

Jonghae Park, **Daesol Cho**, Jusuk Lee, Dongseok Shim, Inkyu Jang and H. Jin. Kim. (2025). Periodic Skill Discovery, Neural Information Processing Systems (NeurIPS).

**Daesol Cho**, Seungyeon Yoo, Dongseok Shim and H. Jin. Kim. (2025). Single-View 3D-Aware Representations for Reinforcement Learning by Cross-View Neural Radiance Fields, IEEE Robotics and Automation Letters (RA-L).

Jusuk Lee, **Daesol Cho**, Jonghon Shin, Taekbeom Lee, Jonghae Park and H. Jin. Kim. (2025). Unifying What and How: Distilling a Pre-trained Unified Skill Representation for Efficient Adaptation, Conference on Robot Learning (CoRL) workshop.

Gawon Lee, **Daesol Cho** and H. Jin. Kim. (2025). Leveraging Temporally Extended Behavior Sharing for Multi-task Reinforcement Learning, International Conference on Intelligent Robots and Systems (IROS).

Hoseong Jung, Sungil Son, **Daesol Cho**, Jonghae Park, Changhyun Choi and H. Jin. Kim. (2025). Temporal Action Representation Learning for Aerial Maneuvering and Resource-Aware Decision-Making, Robotics: Science and Systems (RSS) workshop.

**Daesol Cho**, Jigang Kim and H. Jin. Kim. (2024). Boosting Autonomous Reinforcement Learning via Action-Free Video and Plasticity Preservation, Robotics: Science and Systems (RSS) workshop.

**Daesol Cho**, Seungjae Lee and H. Jin. Kim. (2023). Diversify & Conquer: Outcome-directed Curriculum RL via Out-of-Distribution Disagreement, Neural Information Processing Systems (NeurIPS).

Seungjae Lee, **Daesol Cho**, Jonghae Park and H. Jin. Kim. (2023). CQM: Curriculum Reinforcement Learning with a Quantized World Model, Neural Information Processing Systems (NeurIPS).

Jigang Kim\*, **Daesol Cho\*** and H. Jin. Kim. (2023). Demonstration-free Autonomous Reinforcement Learning via Implicit and Bidirectional Curriculum, International Conference on Machine Learning (ICML), IROS 2023 workshop

Seungjae Lee, Jongho Shin, Hyeong-Geun Kim, **Daesol Cho** and H. Jin. Kim. (2023). Deep End-to-end Imitation Learning for Missile Guidance With Infrared Images, International Journal of Control, Automation and Systems (IJCAS).

<sup>\*</sup> indicates equal contribution.

**Daesol Cho\***, Seungjae Lee\* and H. Jin. Kim. (2023). [Spotlight] Outcome-Directed Reinforcement Learning by Uncertainty & Temporal Distance-Aware Curriculum Goal Generation, International Conference on Learning Representations (ICLR).

**Daesol Cho\***, Dongseok Shim\* and H. Jin. Kim. (2022). S2P: State-conditioned Image Synthesis for Data Augmentation in Offline Reinforcement Learning", Neural Information Processing Systems (NeurIPS).

Jigang Kim, J. hyeon Park, **Daesol Cho** and H. Jin. Kim. (2022). [presented in ICRA 2023] Automating Reinforcement Learning With Example-Based Resets, IEEE Robotics and Automation Letters (RA-L).

**Daesol Cho**, Jigang Kim and H. Jin. Kim. (2022). [presented in IROS 2022] Unsupervised Reinforcement Learning for Transferable Manipulation Skill Discovery, IEEE Robotics and Automation Letters (RA-L).

# Projects\_\_\_\_\_

Mobile Humanoid Research

Atlanta, USA

RESEARCHER September. 2025 - Present

Korea Institute for Advancement of Technology

Transfer of Driving Dynamics Parameter between Car Models Seoul, Korea

PROJECT LEADER April. 2022 - August. 2025

Hyundai Motor Company

Transfer Learning for Multi-agent Systems Seoul, Korea

RESEARCHER October. 2019 - October. 2021

Agency for Defense Development

BabyMind: Infant-Mimic Developmental Machine Learning Seoul, Korea

RESEARCHER April. 2019 - December. 2020

Korea Ministry of Science and ICT

RL Application of an A/C Unit via Domain Randomization Seoul, Korea

RESEARCHER August. 2019 - November. 2020

LG Electronics

## **Honors & Awards & Scholarships**

National Research Foundation of Korea, Sejong Science Fellowship

2023 Youlchon Al Young Researcher Fellowship

2022-2023 Brain Korea 21 Plus (BK21+) Ph.D Fellowship Scholarship

2022 Lecture & Research Scholarship

2019 Summa Cum Laude, Seoul National University2017-2018 National Scholarship for Science and Engineering

2017-2018 System Technology Excellence Foundation (STX Foundation) Domestic Scholarship

2013-2014 National Scholarship for Academic Excellence

## **Academic Activities**

2023-2025 Reviewer (NeurIPS, ICML, ICLR, ICRA, IROS).

 $2024-2025 \qquad \text{Seoul AI Hub, SNU, AI+Robotics Training Program for Skilled Professionals, Reinforcement Learning Instructor.}$ 

2023-2024 Hyundai Motors and LG Group Al Boosting Camp (AIBC) Reinforcement Learning Instructor.

2020-2021 Teaching Assistant at Seoul National University (Aerospace Engineering Experiment).

2019 Teaching Assistant at Seoul National University (Introductory Engineering Probability).

2019 Tutor at Seoul National University (Basic Calculus).

# Skills\_

**Programming** Python, PyTorch, Tensorflow, Matlab, C/C++, LaTeX

**Languages** Korean, English