Daesol **Cho**

Robotics Researcher

756 W Peachtree St NW, Atlanta, GA 30308, United States

(+82) 10-4748-0477, (+1) 404-918-4392 | chodaesol@gmail.com, dcho302@gatech.edu | dscho1234.github.io

Education

SNU (Seoul National University) — *Seoul, Korea*

Ph.D. in Mechanical & Aerospace Engineering — *September. 2021 - February. 2025*

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

SNU (Seoul National University) — *Seoul, Korea*

M.S. in Mechanical & Aerospace Engineering — *September. 2019 - Aug. 2021*

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

SNU (Seoul National University) — *Seoul, Korea*

B.S. in Mechanical & Aerospace Engineering — *Mar. 2013 - Aug. 2019*

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

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

* indicates equal contribution.

Hoseong Jung, Sungil Son, **Daesol Cho**, Jonghae Park, Changhyun Choi and H. Jin. Kim. (2026). Temporal Action Representation Learning for Tactical Resource Control and Subsequent Maneuver Generation, International Conference on Robotics & Automation (ICRA).

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). [presented in ICRA 2026] 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**, Jonghun 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).

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 for Medical Assistance — *Atlanta, USA*
Project Leader for Robot Manipulation — *September. 2025 - Present*
Korea Institute for Advancement of Technology, GeorgiaTech, Neuromeka, KAIST

Transfer of Driving Dynamics Parameter between Car Models — *Seoul, Korea*
Project Leader — *April. 2022 - August. 2025*
Hyundai Motor Company, SNU

Transfer Learning for Multi-agent Systems — *Seoul, Korea*
Researcher — *October. 2019 - October. 2021*
Agency for Defense Development, SNU

BabyMind: Infant-Mimic Developmental Machine Learning — *Seoul, Korea*
Researcher — *April. 2019 - December. 2020*
Korea Ministry of Science and ICT, SNU

RL Application of an A/C Unit via Domain Randomization — *Seoul, Korea*
Researcher — *August. 2019 - November. 2020*
LG Electronics, SNU

Honors & Awards & Scholarships

2025	National Research Foundation of Korea, Sejong Science Fellowship
2023	Youlchon AI Young Researcher Fellowship
2022-2023	Brain Korea 21 Plus (BK21+) Ph.D Fellowship Scholarship
2022	Lecture & Research Scholarship
2019	Summa Cum Laude, Seoul National University
2017-2018	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

2023-2026	Reviewer (NeurIPS, ICML, ICLR, ICRA, IROS, RSS).
2024-2025	Seoul AI Hub, SNU, AI+Robotics Training Program for Skilled Professionals, Reinforcement Learning Instructor.
2023-2024	Hyundai Motors and LG Group AI 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 Languages Python, PyTorch, Tensorflow, Matlab, C/C++, LaTeX
Korean, English