

Dohyeok Lee

✉: dohyeoklee@snu.ac.kr | 🌐: dohyeoklee.github.io | 🐙: github.com/dohyeoklee

Education

Seoul National University(SNU), Ph.D. in ECE	Sep 2024 – present
Seoul National University(SNU), M.S. in ECE	Mar 2022 – Feb 2024
Korea Advanced Institute of Science and Technology(KAIST), B.S. in EE	Mar 2016 – Feb 2020

Publications & Conferences

C=Conference, D=Demo, S=In Submission, W=Workshop

[W2] Dynamics-Aligned Flow Matching Policy for Robot Learning	CVPR EAI Workshop 2025
<i>Dohyeok Lee</i> , Jung Min Lee, Munkyoung Kim, Seokhun Ju, Seungyub Han, Jin Woo Koo, Jungwoo Lee	
[W1] View-Imagination: Enhancing Visuomotor Control with Adaptive View Synthesis	CVPR EAI Workshop 2025
<i>Dohyeok Lee</i> , Munkyoung Kim, Jung Min Lee, Seungyub Han, Jungwoo Lee	
[C2] SPQR: Controlling Q-ensemble Independence with Spiked Random Model for Reinforcement Learning	NeurIPS 2023
<i>Dohyeok Lee</i> , Seungyub Han, Taehyun Cho, Jungwoo Lee	
[D1] ARTificial Expressions: Human-Robot Interactive Drawing (<i>Best Demo</i>)	CVPR Demo 2023
Yejin Kim, <i>Dohyeok Lee</i>	
[C1] Control of Furuta Pendulum with Reinforcement Learning	ICCAS 2019
<i>Dohyeok Lee</i> , Usama Mohammad, Dong Eui Chang	

Work Experience

Robotics Engineer, D.Hive (start-up)	Oct 2020 – April 2021
• Developing autonomous delivery robot	
Robotics Engineer Intern, Crazying Lab. (start-up)	June 2019 – Aug 2019
• Developing autonomous filming mobile robot	

Open Source Projects

Nonlinear controller (★ 20)	🔗
• Implement nonlinear control (robust, adaptive, sliding mode) algorithms on two-arm manipulator simulator	
EKF (★ 14)	🔗
• Implement EKF(Extended Kalman Filter) for sensor fusion of GPS and IMU data with Kitti dataset	
IMPALA	🔗
• Implement IMPALA(Scalable Distributed Deep-RL with Importance Weighted Actor-Learner Architectures) in distributed machine system with ray, redis, UDP	
RRT	🔗
• Implement RRT(Rapid Random Tree) algorithms	

Robotics Projects

Moblie Humanoid	2024
• Developing wheel-based humanoid for moving and picking object	
Robot-AR system	2021
• Developing AR system integrating robot Spot with Unity, ROS	

Vender	2020
<ul style="list-style-type: none"> • Creating A.I media artwork with A.I based emotion recognition and autonomous vending machine system 	
Autonomous Mobile Robot	2018
<ul style="list-style-type: none"> • Developing autonomous mobile robot with YOLO, Tmap API, GPS and compass sensor, etc. 	
Hand-shape Manipulator	2017
<ul style="list-style-type: none"> • Developing hand-shape manipulator and glove-shape interface for teleoperation 	
Maker-based Mobile Robot	2016
<ul style="list-style-type: none"> • Developing mobile robot for maker-based localization and mapping 	