

Education

- **Seoul National University** Seoul, Korea
M.S., Department of Aerospace Engineering *Mar. 2021 - Present*
Advisor: Prof. H. Jin Kim (Lab for Autonomous Robotics Research)
- **Seoul National University** Seoul, Korea
B.S., Department of Mechanical and Aerospace Engineering *Mar. 2015 - Feb. 2021*
GPA: 3.99 (Major: 4.09)/4.30 (11th out of 144 graduating students)
Leave of absence for mandatory military service (2 years)
- **Daegu Science High School** Daegu, Korea
Science high school for gifted students in science and mathematics *Mar. 2012 - Feb. 2015*

Publications (* Equal Contribution) [Publications URL: sjlee.cc]

- CQM: Curriculum Reinforcement Learning with a Quantized World Model **NeurIPS'23**
Seungjae Lee, Daesol Cho, Jonghae Park, H. Jin Kim
Conference on Neural Information Processing Systems, 2023
- Diversify Conquer: Outcome-directed Curriculum RL via Out-of-Distribution Disagreement **NeurIPS'23**
Daesol Cho, Seungjae Lee, H. Jin Kim
Conference on Neural Information Processing Systems, 2023
- SNERL: Semantic-aware Neural Radiance Fields for Reinforcement Learning **ICML'23**
Dongseok Shim, Seungjae Lee*, H. Jin Kim*
International Conference on Machine Learning, 2023
- Outcome-directed Reinforcement Learning by Uncertainty & Temporal Distance-Aware Curriculum Goal Generation *Spotlight*
ICLR'23
Daesol Cho, Seungjae Lee*, H. Jin Kim*
International Conference on Learning Representations, 2023
- Deep End-to-End Imitation Learning for Missile Guidance with Infrared Images **IJCAS'23**
Seungjae Lee, Jongho Shin, Hyeong-Geun Kim, Daesol Cho, H. Jin Kim
International Journal of Control, Automation and Systems, 2023
- DHRL: A Graph-Based Approach for Long-Horizon and Sparse Hierarchical Reinforcement Learning *Oral*
NeurIPS'22
Seungjae Lee, Jigang Kim, Inkyu Jang, H. Jin Kim
Conference on Neural Information Processing Systems, 2022
- Robust and Recursively Feasible Real-Time Trajectory Planning in Unknown Environments **IROS'21**
Inkyu Jang, Dongjae Lee, Seungjae Lee, H. Jin Kim
IEEE/RSJ International Conference on Intelligent Robots and Systems, 2021

Projects

- **Vector-Quantized Behavior Transformer for Multi-Modal Demonstrations** *Jul. 2023 - Present*
Co-work with Generalizable Robotics and AI Lab (Prof. Lerrel Pinto) at New York University
- **Training Excavator Virtual Driver based on Inverse RL** *Apr. 2023 - Present*
Co-work with with HD Hyundai Heavy Industries Co., Ltd.
- **End-to-End Machine Learning Based Guidance Research** *May. 2021 - Apr. 2023*
Co-work with the Agency for Defense Development (National Research Institute of Korea)

Teaching / Work Experience

- **AI Technical Coach, Teen Startup Team**
AI Music & Gallery Team, Applied Computing Foundation *Jun. 2023 - Present*
- **Teaching Assistant, 2023 Hyundai Motor Company AI Boosting Camp**
Innovation Center for Engineering Education, Seoul National University *Aug. 2023*
- **Teaching Assistant, Principles of Flight Vehicle Control (M2795.002600)**
Department of Aerospace Engineering, Seoul National University *Spring 2021*
- **Talent Internship Program, Samsung Electronics Co., Ltd.**
Deep Learning Algorithm Team, Device Solutions (DS) *Jul. 2020 - Aug. 2020*
- **Mentor & Camp Leader, Dream Consultant (NPO)**
Non-Profit Organization (NPO) for Social Contribution in Seoul *Jul. 2016 - Sep. 2020*
- **Tutor, Basic Physics 1 (034.005), Basic Physics 2 (034.006)**
Faculty of Liberal Education, Seoul National University *Fall 2016, Spring 2019, Fall 2019*

Awards / Achievements / Invited talks

- (Invited Talk) LG tech talk, LG AI Research *Aug. 2023*
- (Scholarship) Hyundai Motor Chung Mong-Koo Foundation *Sep. 2021 - Jun. 2023*
- (Awards) Global Excellence Scholarship 2023, Hyundai Motor Chung Mong-Koo Foundation *Jun. 2023*
- (Awards) Top Prize at SNU AI Institute Spring Retreat Best Poster Competition *May. 2023*
- (Awards) Global Excellence Scholarship 2022, Hyundai Motor Chung Mong-Koo Foundation *Dec. 2022*
- (Awards) NeurIPS Scholar Award *Dec. 2022*
- (Awards) Brain Korea 21 (BK21) Aerospace Excellence Research Award *Feb. 2022*
- (Awards) Graduated Summa Cum Laude, Seoul National University *Feb. 2021*
- (Scholarship) OK Bae&Jung Scholarship Foundation *Mar. 2020 - Feb. 2021*