KYOWOON LEE

leekwoon@kaist.ac.kr (+82) 10-2857-7771 https://leekwoon.github.io

RESEARCH INTERESTS

Deep reinforcement learning: unsupervised skill discovery and goal-conditioned reinforcement learning.

PROFESSIONAL EXPERIENCE

Korea Advanced Institute of Science and Technology (KAIST)
Postdoctoral Researcher — Oct 2024 - present

EDUCATION

Ulsan National Institute of Science and Technology (UNIST)
Combined M.S. and Ph.D. Program in Computer Science and Engineering — *Sep 2016 - Aug 2024*

Ulsan National Institute of Science and Technology (UNIST)
B.S. in Computer Science and Engineering, *summa cum laude* — *Mar 2012 - Aug 2016*
GPA (Overall): 4.01/4.3

HORNORS AND AWARDS

Awards

- Naver Ph.D. Fellowship Award, Naver, 2018
- SAIL Research Excellence Award, Statistical Artificail Intelligence Lab, UNIST, 2018.
- Summa Cum Laude, UNIST, 2016.

Competitions

- **Winner (the 1st place)**, Breast Cancer Classification on Frozen Pathology, HeLP Challenge at Asan Medical Center, 2019.
- **Winner (the 1st place)**, UEC-cup Digital Curling Competition, Game AI Tournament, 2018.
- **Winner (the 1st place)**, Digital Curling Competition, Game Playing Workshop, 2017.

Scholarship

- National Science and Technology Scholarship, Korean Student Aid Foundation, 2012 - 2016.

PUBLICATIONS AND PREPRINTS

Submitted/Under Revision

1. **Kyowoon Lee** and Jaesik Choi, *State-Covering Trajectory Stitching for Diffusion Planning*.

International Conferences (*: equal contribution)

1. **Kyowoon Lee**, Artyom Stitsyuk, Gunu Jho, Inchul Hwang and Jaesik Choi, *Counterfactual Activation Editing for Post-hoc Prosody and Mispronunciation Correction in TTS Models*, **Interspeech**, 2025.
2. **Kyowoon Lee** and Jaesik Choi, *Local Manifold Approximation and Projection for Manifold-Aware Diffusion Planning*, International Conference on Machine Learning **(ICML)**, 2025.
3. **Kyowoon Lee***, Seongun Kim* and Jaesik Choi, *Refining Diffusion Planner for Reliable Behavior Synthesis by Automatic Detection of Infeasible Plans*, Conference on Neural Information Processing Systems **(NeurIPS)**, 2023.

4. Seongun Kim*, **Kyowoon Lee*** and Jaesik Choi, *Variational Curriculum Reinforcement Learning for Unsupervised Discovery of Skills*, International Conference on Machine Learning **(ICML)**, 2023.

5. **Kyowoon Lee***, Seongun Kim* and Jaesik Choi, *Adaptive and Explainable Deployment of Navigation Skills via Hierarchical Deep Reinforcement Learning*, International Conference on Robotics and Automation **(ICRA)**, 2023.

6. Jiyeon Han*, **Kyowoon Lee***, Anh Tong and Jaesik Choi, *Confirmatory Bayesian Online Change Point Detection in the Covariance Structure of Gaussian Processes*, International Joint Conference on Artificial Intelligence **(IJCAI)**, 2019.

7. **Kyowoon Lee***, Sol-A Kim*, Jaesik Choi and Seong-Hwan Lee, *Deep Reinforcement Learning in Continuous Action Spaces: a Case Study in the Game of Simulated Curling*, International Conference on Machine Learning **(ICML)**, 2018.

REFERENCES

Prof. Jaesik Choi: Associate Professor in the Graduate School of Artificial Intelligence, KAIST