Suyoung Lee

Contact Samsung Seoul R&D Campus Email: suyounglee424@gmail.com Information 56 Seongchon-gil, Seocho-gu, su-young.lee@samsung.com Homepage: https://suyoung-lee.github.io Seoul, Republic of Korea Research Deep reinforcement learning (RL), especially meta-RL, generalization, offline RL, and Interests sequential decision-making. Career Staff Engineer, Samsung Research, Seoul, Republic of Korea. Mar. 2024 - present Language Intelligence Team. Aug. 2022 - Feb. 2024 **EDUCATION** Ph.D. Candidate, Electrical Engineering. Korea Advanced Institute of Science and Technology (KAIST). Advisor: Prof. Youngchul Sung. Ph.D. Candidate, Electrical Engineering. Mar. 2019 - Aug. 2022 Korea Advanced Institute of Science and Technology (KAIST). Advisor: Prof. Sae-Young Chung. Mar. 2017 - Feb. 2019 M.S., Electrical Engineering. Korea Advanced Institute of Science and Technology (KAIST). Advisor: Prof. Sae-Young Chung. **B.S.**, Electrical Engineering Feb. 2012 - Feb. 2017 Korea Advanced Institute of Science and Technology (KAIST). Hansung Science High School, Seoul, Republic of Korea. Mar. 2010 - Feb. 2012 Honors Outstanding Ph.D. Dissertation Award. 2024 Thesis: Meta-Reinforcement Learning with Imaginary Tasks, KAIST EE. Qualcomm-KAIST Innovation Awards. 2018 Paper competition awards for graduate students, Qualcomm. Un Chong-Kwan Scholarship Award. 2017 For achievement of excellence in 2017 entrance examination, KAIST EE. **Publications** [C] Conference [W] Workshop [P] Preprint [C1] Suyoung Lee, Sungik Choi, and Sae-Young Chung. "Sample-Efficient Deep Reinforcement Learning via Episodic Backward Update." Neural Information Processing Systems (NeurIPS) 2019. [C2] Suyoung Lee and Sae-Young Chung. "Improving Generalization in Meta-RL with Imaginary Tasks from Latent Dynamics Mixture." Neural Information Processing Systems (NeurIPS) 2021.

- [C3] Suyoung Lee, Myungsik Cho, and Youngchul Sung. "Parameterizing Non-Parametric Meta-Reinforcement Learning Tasks via Subtask Decomposition." Neural Information Processing Systems (NeurIPS) 2023.
- [C4] Jeonghye Kim, Suyoung Lee, Woojun Kim, and Youngchul Sung "Decision ConvFormer: Local Filtering in Metaformer is Sufficient for Decision Making." International Conference on Learning Representations (ICLR) 2024 as spotlight presentation (366/7262=5.0%).

- [C5] Myungsik Cho, Jongeui Park, Suyoung Lee, and Youngchul Sung. "Hard Task First: Multi-Task Reinforcement Learning through Task Scheduling." International Conference on Machine Learning (ICML) 2024.
- [W1] Suyoung Lee and Sae-Young Chung. "Adaptive Intrinsic Motivation with Decision Awareness." Decision Awareness in Reinforcement Learning Workshop at International Conference on Machine Learning (ICML) 2022.
- [W2] Jeonghye Kim, Suyoung Lee, Woojun Kim, and Youngchul Sung. "Decision ConvFormer: Local Filtering in MetaFormer is Sufficient for Decision Making." Foundation Models for Decision Making Workshop at Neural Information Processing Systems (NeurIPS) 2023.
- [P1] Jeonghye Kim, **Suyoung Lee**, Woojun Kim, and Youngchul Sung "Value-Aided Conditional Supervised Learning for Offline RL." arXiv Preprint.

Languages

Korean (native)

English (fluent) - TOEIC 950 (23.06.28)

Russian (basic)

(International linguistic experience at Tashkent International School, 2007–2009.)

Programming Languages

MATLAB and Python (PyTorch/TensorFlow).

GitHub: https://github.com/suyoung-lee

ACADEMIC SERVICES

Invited talk

 KAIST EE Graduate School REEsearch Party: academic seminar by doctoral graduates who won outstanding thesis awards, April 2024.

Conference reviewer

- International Conference on Machine Learning (ICML): 2021–2024
- Neural Information Processing Systems (NeurIPS): 2021–2023
- Internation Conference on Learning Representations (ICLR): 2024

Program committee

• Foundation Models for Decision Making Workshop (FMDM) at Neural Information Processing Systems (NeurIPS) 2023.

TEACHING EXPERIENCE

Teaching assistant (KAIST)

Spring 2018 to Fall 2020

- EE326 Introduction to Information Theory and Coding.
- EE210 Probability and Introductory Random Processes.
- EE105 Electrical Engineering: Changing the World.
- EE405 Electronics Design Lab. Network of Smart Things.
- EE807 Special Topics in EE. Deep Reinforcement Learning and AlphaGo.
 - Course rewarded for the **outstanding TA award** at KAIST EE.
- EE405 Electronics Design Lab. Network of Smart Systems.