Suyoung Lee

Email: suyounglee424@gmail.com 231 Teheran-ro, Gangnam District, Contact Seoul, Republic of Korea Homepage: https://suyoung-lee.github.io Information Research LLM Agents Interests Agent framework, function calling, reasoning, and planning. Reinforcement Learning – practical application Meta-RL, generalization, sample efficiency, exploration, and offline RL. Aug. 2025 - present Krafton CAREER Gameplay AI Team, Deep Learning Division, Seoul. Mar. 2024 - Jul. 2025 Samsung Electronics Semantic T/F, AI Model Team, Samsung Research, Seoul. - Finetuning on-device LLM: screen entity extraction. - AI Agent Framework: GUI Agent and Text-to-SQL Agent. EDUCATION Ph.D., Electrical Engineering. Aug. 2022 - Feb. 2024 Korea Advanced Institute of Science and Technology (KAIST). Advisor: Prof. Youngchul Sung. Ph.D. Candidate, Electrical Engineering. Feb. 2019 - Aug. 2022 Korea Advanced Institute of Science and Technology (KAIST). Advisor: Prof. Sae-Young Chung. Feb. 2017 - Feb. 2019 M.S., Electrical Engineering. Korea Advanced Institute of Science and Technology (KAIST). Advisor: Prof. Sae-Young Chung. Feb. 2012 - Feb. 2017 **B.S.**, Electrical Engineering 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 [J] Journal [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

[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.
- [C6] Jeonghye Kim, Suyoung Lee, Woojun Kim, and Youngchul Sung "Adaptive Q-Aid for Conditional Supervised Learning in Offline Reinforcement Learning." Neural Information Processing Systems (NeurIPS) 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.
- [J1] Gyeongmin Kim, Jeonghye Kim, Suyoung Lee, Jaewoo Baek, Howon Moon, Sangheon Shin, and Youngchul Sung. "Robust Reinforcement Learning Under Dimension-Wise State Information Drop." IEEE Access, 2024.

Languages

Korean (native)

English (fluent) – TOEIC 950 (23.06.28), OPIc IH (24.06.08)

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): 2021–2025
- Neural Information Processing Systems (NeurIPS): 2021–2025
- 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.

- \bullet 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.
- \bullet EE405 Electronics Design Lab. Network of Smart Systems.