

# Suyoung Lee

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CONTACT INFORMATION	231 Teheran-ro, Gangnam District, Seoul, Republic of Korea	<b>Email:</b> <a href="mailto:suyounglee424@gmail.com">suyounglee424@gmail.com</a> <b>Homepage:</b> <a href="https://suyoung-lee.github.io">https://suyoung-lee.github.io</a>
RESEARCH INTERESTS	AI Agent Agent harnessing, automated research, reasoning, and planning. Reinforcement Learning – practical application Meta-RL, generalization, sample efficiency, exploration, and offline RL. VLA Vision-language-action models for gameplay / screen control agents.	
CAREER	<b>Krafton</b> Gameplay AI Team, AI Research Division, Seoul. - Large-scale distributed RL and VLA training on PUBG	<i>Aug. 2025 – present</i>
	<b>Samsung Electronics</b> 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.	<i>Mar. 2024 – Jul. 2025</i>
EDUCATION	<b>Ph.D.</b> , Electrical Engineering. Korea Advanced Institute of Science and Technology (KAIST). Advisor: Prof. Youngchul Sung.	<i>Aug. 2022 – Feb. 2024</i>
	<b>Ph.D. Candidate</b> , Electrical Engineering. Korea Advanced Institute of Science and Technology (KAIST). Advisor: Prof. Sae-Young Chung.	<i>Feb. 2019 – Aug. 2022</i>
	<b>M.S.</b> , Electrical Engineering. Korea Advanced Institute of Science and Technology (KAIST). Advisor: Prof. Sae-Young Chung.	<i>Feb. 2017 – Feb. 2019</i>
	<b>B.S.</b> , Electrical Engineering Korea Advanced Institute of Science and Technology (KAIST).	<i>Feb. 2012 – Feb. 2017</i>
	Hansung Science High School, Seoul, Republic of Korea.	<i>Mar. 2010 – Feb. 2012</i>
HONORS	<b>Outstanding Ph.D. Dissertation Award.</b> Thesis: <i>Meta-Reinforcement Learning with Imaginary Tasks</i> , KAIST EE.	<i>2024</i>
	Qualcomm-KAIST Innovation Awards. Paper competition awards for graduate students, Qualcomm.	<i>2018</i>
	Un Chong-Kwan Scholarship Award. For achievement of excellence in 2017 entrance examination, KAIST EE.	<i>2017</i>
PUBLICATIONS	[C] Conference [W] Workshop [P] Preprint [J] Journal [C1] <b>Suyoung Lee</b> , Sungik Choi, and Sae-Young Chung. “ <i>Sample-Efficient Deep Reinforcement Learning via Episodic Backward Update.</i> ” <i>Neural Information Processing Systems (NeurIPS)</i> 2019. [C2] <b>Suyoung Lee</b> and Sae-Young Chung. “ <i>Improving Generalization in Meta-RL with Imaginary Tasks from Latent Dynamics Mixture.</i> ” <i>Neural Information Processing Systems (NeurIPS)</i> 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.

OPEN SOURCE	<b>Prompt2Policy</b> <a href="https://github.com/krafton-ai/Prompt2Policy">github.com/krafton-ai/Prompt2Policy</a>   <a href="#">blog</a>	Apr. 2026
	<ul style="list-style-type: none"> <li>• Agentic engineering for reinforcement learning: describe a behavior in a prompt, get a trained policy.</li> </ul>	
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	Claude Code <del>MATLAB</del> and Python (PyTorch/TensorFlow). GitHub: <a href="https://github.com/suyoung-lee">https://github.com/suyoung-lee</a>	
ACADEMIC SERVICES	Invited talk <ul style="list-style-type: none"> <li>• KAIST EE Graduate School REEsearch Party: academic seminar by doctoral graduates who won outstanding thesis awards, April 2024.</li> </ul> <p>Conference reviewer</p> <ul style="list-style-type: none"> <li>• International Conference on Machine Learning (ICML): 2021–2025</li> <li>• Neural Information Processing Systems (NeurIPS): 2021–2025</li> <li>• International Conference on Learning Representations (ICLR): 2024</li> </ul> <p>Program committee</p> <ul style="list-style-type: none"> <li>• Foundation Models for Decision Making Workshop (FMDM) at Neural Information Processing Systems (NeurIPS) 2023.</li> </ul>	

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.