



Joongkyu Lee

 [linkedin.com/in/joongkyu-lee-939aa91a7](https://www.linkedin.com/in/joongkyu-lee-939aa91a7)  jkleee0717@snu.ac.kr

RESEARCH INTERESTS

Sequential Decision Making, Reinforcement Learning, Bandit Algorithms, Statistical Machine Learning, Optimization

EDUCATION

Seoul National University, Seoul, South Korea Mar. 2023 - **Present**
Ph.D Candidate in Data Science, Advisor: Min-hwan Oh

Seoul National University, Seoul, South Korea Feb. 2023
M.S. in Data Science, Advisor: Min-hwan Oh

Yonsei University, Seoul, South Korea Feb. 2016
B.S. in Industrial Engineering

PUBLICATIONS

- [2] **Demystifying Linear MDPs and Novel Dynamics Aggregation Framework**
 J. Lee and M. Oh
Proceedings of the 12th International Conference on Learning Representations (ICLR), 2024.
- [1] **Learning Uncertainty-Aware Temporally-Extended Actions**
 J.Lee, S. Park, Y. Tang, and M. Oh
Proceedings of the 38th AAAI Conference on Artificial Intelligence (AAAI), 2024.

PREPRINTS

- [1] **Nearly Minimax Optimal Regret for Multinomial Logistic Bandit**
 J. Lee and M. Oh
Preprint. Under review. Uploaded to arXiv, 2024.

EXPERIENCE

Samsung Electronics | *SQL, Python* Aug. 2018 - Dec. 2020

- Production Management Group at Samsung Electronics DS

Military Service Mar. 2016 - Mar.2018

- Republic of Korea Air Force

INDUSTRY PROJECTS

Development of Analysis Model to Explore Test Process Equipment Combination and Improve Flexible Test Performance Mar. - Sep. 2022

- Director: Prof. Min-hwan Oh
- Funded by *SK hynix*

Development of an AI-Based Virtual Fighter Jet Training System Feb. 2024 - **Present**

- Director: Prof. Min-hwan Oh
- Funded by *Korea Aerospace Industries (KAI), LTD*

INVITED TALKS & CONFERENCE PRESENTATION

“Contextual Linear Bandits” and “Deep Reinforcement Learning” July. - Aug. 2023

- SK Telecom Market Top AI Course

“Hierarchical Model-Based Reinforcement Learning with Linear Function Approximation” July. 2023

- 2023 Korea Artificial Intelligence Association (KAIA), **Best Paper Award**
- Earlier Version of “Demystifying Linear MDPs and Novel Dynamics Aggregation Framework”

“Learning Uncertainty-Aware Temporally-Extended Actions”

- 2023 Korea Data Mining Society June. 2023
- 2022 INFORMS Annual meeting, Indianapolis Oct. 2022
- 2022 Korea Artificial Intelligence Association (KAIA) Aug. 2022

AWARDS & SCHOLARSHIPS

- Best Paper Award**, Korea Artificial Intelligence Association July. 2023
- National Excellence Scholarship**, Korea Student Aid Foundation Spring. 2010 - Fall. 2013

TEACHING EXPERIENCE

- Seoul National University**, Seoul, South Korea
- Machine Learning & Deep Learning Spring. 2022
- Data Science & Reinforcement Learning Fall. 2021