# Joongkyu Lee

#### Research Appointment

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

#### 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), to appear, 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), to appear, 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

#### Invited Talks & Conference Presentation

"Contextual Linear Bandits" and "Deep Reinforcement Learning"

• SK Telecom Market Top AI Course

July. - Aug. 2023

"Hierarchical Model-Based Reinforcement Learning with Linear Function Approximation"

• 2023 Korea Artificial Intelligence Association (KAIA), Best Paper Award

July. 2023

• 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