

RESEARCH INTEREST My research focuses on Causal Decision Making and Causal Effect Identification. I study how to graphically model a wide range of real-world problems in a causal manner and make optimal decisions. In particular, my research explores methods for making robust decisions, even when modeling with incomplete information, and decision-making processes in sequential settings.

Education Graduate School of Data Science, Seoul National University Seoul
Integrated M.S and Ph.D in Data Science Fall 2022 - present

- Advisor: Prof. Sanghack Lee
- Research area: Causal Decision Making, Causal Effect Identification

Department of Mathematics and Statistics, Sejong University Seoul
B.S. in Applied statistics and Mathematics (Cum Laude) Spring 2016 - Spring 2022

- Advisor: Prof. Ji Eun Lee
- Research area: Operator Theory

- Publications**
1. Structural Causal Bandits under Markov Equivalence
Min Woo Park, Andy Ardit, Elias Bareinboim[†], Sanghack Lee[†]
Neural Information Processing Systems (NeurIPS), 2025.
Columbia CausalAI Laboratory, Technical Report (R-122).
 2. Complete Graphical Criterion for Sequential Covariate Adjustment in Causal Inference
Yonghan Jung[†], Min Woo Park, and Sanghack Lee[†]
Neural Information Processing Systems (NeurIPS), 2024.
 3. Computation of the iterated Aluthge, Duggal, and Mean transforms
Min Woo Park^{*}, and Ji Eun Lee^{*†}
Filomat, 2023.
 4. Counterfactual Structural Causal Bandits
Min Woo Park and Sanghack Lee[†]
under review.
 5. On Transportability for Structural Causal Bandits
Min Woo Park and Sanghack Lee[†]
under review.
 6. Convergence of the iterated mean transforms of a 2×2 matrix
Ji Eun Lee^{*†} and Min Woo Park^{*}
under review.

* for joint first authorship and [†] for corresponding author

Awards and Honors

BK21 Scholarship	Seoul National University	2024 - 2025
4th place Award	The 9th College of Natural Sciences Academic Conference, Sejong University	Nov 2021
First Place Academic Scholarship	Department of Mathematics and Statistics, Sejong University	Fall 2021
Third Place Award	The 8th College of Natural Sciences Academic Conference, Sejong University	Nov 2020
First Place Academic Scholarship	Department of Mathematics and Statistics, Sejong University	Fall 2020

Projects

Scalable Causal Discovery	LG AI Research	Sep 2025 - present
Hyundai NGV Data Boot-Campus		July 2025 - Sep 2025
Hyundai NGV Data Boot-Campus		July 2024 - Sep 2024

Teaching Assistants	Causal Inference for Data Science	Spring 2025
	Causal Inference for Data Science	Fall 2024
	Causal Inference for Data Science	Spring 2024
	Machine Learning and Deep Learning for Data Science II	Fall 2023
	Basic Mathematics for Artificial Intelligence	Spring 2022
Invited Talks	NeurIPS 2025 poster session San Diego	Dec 2025
	JKAILA 2025 NeurIPS preview poster session Seoul	Nov 2025
	SNU GSDS student research seminar Seoul National University	Dec 2024, Apr 2025
	NeurIPS 2024 poster session Vancouver	Dec 2024
Academic Services	Conference Reviewer: 2026 ICLR, 2025 ICML	
Reference	Sanghack Lee Seoul National University Associate professor	sanghack@snu.ac.kr
	Ji Eun Lee Sejong University Associate Professor	jieunlee7@sejong.ac.kr

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