MIN WOO PARK Ph.D. candidate

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

Fall 2022 - present

- Integrated M.S and Ph.D in Data Science
 - 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 (Double Major)

Spring 2016 - Spring 2022

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

Publications

- Structural Causal Bandits under Markov Equivalence <u>Min Woo Park</u>, Andy Arditi, 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.
- Counterfactual Structural Causal Bandits <u>Min Woo Park</u> and Sanghack Lee[†] under review.
- On Transportability for Structural Causal Bandits <u>Min Woo Park</u> 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
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 Un	iversity 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 Un	iversity Fall 2020

Projects

Scalable Causal Discovery | LG AI Research

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	SNU GSDS Student Research Seminar Seoul National University	Apr 2025
	NeurIPS Poster Session Vancouver, Canada	Dec 2024
	SNU GSDS Student Research Seminar Seoul National University	Dec 2024
Academic Services	Conference Reviewer: ICML 2025	
Reference	Sanghack Lee Seoul National University Associate professor	sanghack@snu.ac.kr
	Ji Eun Lee Sejong University Associate Professor	jieunlee7@sejong.ac.kr

Last updated: Sep 24, 2025