

Hyemi Kim (she/her)

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INTERESTS	Fairness, Pricing, Transportation Systems, Machine Learning	
EDUCATION	Columbia University	New York, United States
	<i>Ph.D. Candidate in Operations Research</i>	Aug. 2021 - present
	• Advisor: Adam N. Elmachtoub	
	Korea Advanced Institute of Science & Technology	Daejeon, Korea
	<i>M.S. in Industrial and Systems Engineering (ISysE)</i>	Sep. 2018 - Aug. 2020
	• Advisor: Il-Chul Moon	
	<i>B.S. in ISysE and Electrical Engineering (Summa Cum Laude)</i>	Feb. 2012 - Aug. 2018
PUBLICATIONS	[1] Black-Box EM Algorithm for Estimating Latent States of High-Speed Vehicles	
	Yoon-Yeong Kim, Hyemi Kim, WonSung Lee, Han-Lim Choi, and Il-Chul Moon	
	<i>American Institute of Aeronautics and Astronautics, 2021.</i>	
	[2] Counterfactual Fairness with Disentangled Causal Effect Variational Autoencoder	
	Hyemi Kim, Seungjae Shin, JoonHo Jang, Kyungwoo Song, Weonyoung Joo, Wanmo Kang, and Il-Chul Moon	
	<i>Association for the Advancement of Artificial Intelligence (AAAI) 2021.</i>	
	[3] Neutralizing Gender Bias in Word Embedding with Latent Disentanglement and Counterfactual Generation	
	Seungjae Shin, Kyungwoo Song, Joonho Jang, Hyemi Kim, Weonyoung Joo, and Il-Chul Moon	
	<i>Findings of Empirical Methods in Natural Language Processing (Findings of EMNLP) 2020.</i>	
	[4] Deep Generative Positive-Unlabeled Learning under Selection Bias	
	ByeongHu Na, Hyemi Kim, Kyungwoo Song, Weonyoung Joo, Yoonyeong Kim, and Il-Chul Moon	
	<i>Conference on Information and Knowledge Management (CIKM) 2020.</i>	
WORKING PAPER	Fair Fares for Vehicle Sharing Systems	
	Adam N. Elmachtoub and <u>Hyemi Kim</u>	
WORK EXPERIENCE	Data Scientist, MOLOCO, INC, Intern	Jun. 2024 - Aug. 2024
	Designed and executed budget pacing simulations for online advertisements	Redwood City, U.S.
	AI Research, NAVER Corporation, Intern	Seongnam, Korea
	Studied Test-time Training method in Machine Learning for AI Robustness	Jan. 2021 - July. 2021
TEACHING ASSISTANT	Introduction to Probability and Statistics	Sep. 2024 - Dec. 2024, Columbia IEOR
	Stochastic Models	Jan. 2024 - May. 2024, Columbia IEOR
	Analytics in Action	Sep. 2023 - Dec. 2023, Columbia Business School
	Transportation Analytics & Logistics	Jan. 2023 - May. 2023, Columbia IEOR
	Causal Inference	Jan. 2022 - May. 2022, Columbia IEOR
	Data Structure	Aug. 2018 - Dec. 2018 & Aug. 2019 - Jun. 2020, KAIST ISysE
HONORS & AWARDS	Finalist, INFORMS DEI Best Student Paper Award, 2024	
	Finalist, INFORMS Transportation Science and Logistics Society Best Student Paper Award, 2024	
	Finalist, INFORMS BSS Data Challenge, 2023	
	Deming Doctoral Fellowship, Columbia University, 2023	
	Songhyun Awards, Korea Advanced Institute of Science and Technology, 2019	
	Presidential Science Scholarship, Korea Foundation for Advanced Studies (KFAS), 2012	
SKILLS	Programming Python, MATLAB, C; Framework PyTorch, Tensorflow, Gurobi, Pyomo	
LANGUAGE	English (advanced), Korean (native)	