

Munjung Kim

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Education & Training	Indiana University Bloomington <i>Doctor of Philosophy, Informatics</i> <ul style="list-style-type: none">Advisor: Dr. Yong-Yeol Ahn	Aug 2022–Present
	Pohang University of Science and Technology <i>Bachelor of Science, Physics</i>	Feb 2017 - Feb 2022
	Santa Fe Institute Complex Systems Summer School	Jun 2023 - July 2023
Work Experience	Nokia Bell Labs Research Intern <ul style="list-style-type: none">Identifying job tasks expected to be impacted by disruptive AI technologies using LLMs, text embeddings, and patent citation network analysis [W2]	<i>Cambridge, UK</i> June 2024– Aug 2024
	SK Hynix Quality Control Intern	<i>Icheon, South Korea</i> Jan 2020– Feb 2020
Research Interest	Machine Learning (network representation learning, language model) Computational Social Science (innovation, science of science, research topic selection)	
Working Papers	[W1] Munjung Kim and Yong-Yeol Ahn. <i>Mitigating Imitative Falsehoods in LLMs Through Crowdsourcing Techniques</i> . [W2] Munjung Kim , Marios Constantinides, Sanja Šćepanović, Yong-Yeol Ahn, and Daniele Quercia. <i>Augmenting Minds or Automating Routines? The Potential Impact of Disruptive AI Innovations on U.S. Occupations</i> . [W3] Munjung Kim , Sadamori Kojaku, and Yong-Yeol Ahn. <i>Uncovering simultaneous scientific breakthroughs with a robust measure of disruptiveness</i> . Submitted to <i>Nature</i> . [Draft] [github]. [W4] Rachith Aiyappa, Xin Wang, Munjung Kim , Ozgur Can Seckin, Jisung Yoon, Yong-Yeol Ahn, and Sadamori Kojaku. “Implicit degree bias in the link prediction task”. <i>arXiv preprint arXiv:2405.14985</i> (2024).	
Publications	[A1] Munjung Kim , Tuğrulcan Elmas, and Filippo Menczer. “Toxic Synergy Between Hate Speech and Fake News Exposure”. <i>Proceedings of the 18th International AAAI Conference on Web and Social Media (ICWSM 2024)</i> (2024). [A2] Matthew R DeVerna, Rachith Aiyappa, Wanying Zhao, Manita Pote, Bao Tran Truong, David Axelrod, Aria Pessianzadeh, Zoher Kachwala, Munjung Kim , Ozgur Can Seckin, et al. “A multi-platform collection of social media posts about the 2022 US midterm elections”. <i>Proceedings of the international AAAI conference on web and social media</i> (2023). [A3] Munjung Kim , Jisung Yoon, Woo-Sung Jung, and Hyunuk Kim. “Quantifying the topic disparity of scientific articles”. <i>Companion Proceedings of the Web Conference 2022</i> (2022), pp. 769–773.	
Oral Presentations	Invited Talks <ul style="list-style-type: none">KDI School Special LectureKAIST STP Science of Science Research SeminarSNU Business School WorkshopKISTI	12/17/2024 12/18/2024 01/03/2025 01/24/2025

Contributed Talks

Munjung Kim, Sadamori Kojaku, and Yong-Yeol Ahn. "A Continuous Embedding Measure of Disruptiveness Reveals Hidden Simultaneous Disruption". IC2S2. 2024.

Munjung Kim, Sadamori Kojaku, and Yong-Yeol Ahn. "Quantifying disruptiveness using neural embedding method". Netsci 2023. 2023.

Munjung Kim, Jisung Yoon, Hyunuk Kim, and Woo-Sung Jung. "Neural embedding of research papers reveals characteristics of policy research institutes". Networks 2021: A Joint Sunbelt & NetSci Conference. 2021.

Munjung Kim. "Quantitative Analysis on Institutions' Activity Policy Research with Embedding Method". Korea Academy of Complexity Studies. 2019.

Munjung Kim, Jisung Yoon, and Woo-Sung. "Quantitative Analysis on Institutions' Activity Policy Research with Embedding Method". Korea Academy of Complexity Studies. 2019.

Honors & Awards

Humane Studies Fellowship, Institute for Humane Studies,
2024/ ca. \$5,000

National Scholarship for Excellence (Sci. & Eng.), Korea Student Aid Foundation,
2017-2021 / ca. \$20,000

Global Talent Attraction Program (Postponed due to Covid19), Indiana University,
2020 / ca. \$4,000

Semester of High Honor, 2019, 2020, 2021

Senior Mentoring Program Scholarship, 2019,2020

Skills

Computer Language: Python, R, Matlab, C, C++, Cython

Workflow for Reproducible Data Analysis: Snakemake

Analysis Modules: Pytorch, Sci-kit Learn, Numpy, Scipy, Pandas, igraph, NetworkX

Languages: English (Proficient), Korean (Native)

Service

Journal Reviewer

- 2025 Nature Matters Arising

Conference Reviewer

- International Society for Scientometrics and Informetrics 2023 conference
- International Workshop on Cyber Social Threats (CySoc '23)
- International Workshop on Cyber Social Threats (CySoc '24)

References

Dr. Yong-Yeol Ahn, Associate Professor

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