Junsol Kim

Curriculum Vitae Nov 2023

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[Google Scholar Profile]

Research Interests

Political Sociology, Computational Social Science, Large Language Model, Social Media, Causal Inference

Education

| 2021-Current | Ph.D. in Sociology (Advisor: James Evans), University of Chicago |
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| 2021-2023 | M.A. in Sociology, University of Chicago |
| 2013–2019 | B.S. in Computer Science & B.A. in Sociology, Yonsei University |

Working Papers

<u>Junsol Kim</u>, Byungkyu Lee. (2023). "AI-Augmented Surveys: Leveraging Large Language Models for Opinion Prediction in Nationally Representative Surveys." [paper] [demo]

- Fine-tuned large language models (LLMs) to predict survey participants' missing responses, aiming to recover unmeasured public opinions in surveys.

<u>Junsol Kim</u>, Zhao Wang, James Evans. (2023). "Individual Misinformation Tagging Reinforces Ideological Echo Chamber; Collective Tagging Weakens Them." [paper]

- Applied quasi-experimental, causal inference methods to large-scale social media data to study how misinformation moderation could unintentionally reinforce echo chambers.

Selected Publications (*equal contribution)

Peer-reviewed journal articles

Ryan Hyon, Yoosik Youm, <u>Junsol Kim</u>, Jeanyoung Chey, Seyul Kwak and Carolyn Parkinson. (2020). "Similarity in Functional Brain Connectivity at Rest Predicts Interpersonal Closeness in the Social Network of an Entire Village." *Proceedings of the National Academy of Sciences*, 117(52), 33149-33160. [paper] [data] [code]

Yoosik Youm*, <u>Junsol Kim</u>*, Seyul Kwak and Jeanyung Chey. (2021). "Neural and Social Correlates of Attitudinal Brokerage: Using the Complete Social Networks of Two Entire Villages." *Proceedings of the Royal Society B: Biological Sciences*, 288(1944), 20202866. [paper] [data] [code]

Yoosik Youm, Byungkyu Lee, <u>Junsol Kim</u>. (2021). "A Measure of Centrality in Cyclic Diffusion Processes: Walk-Betweenness." *PLoS ONE*, *16*(1), e0245476. [paper] [data] [code]

Professional Experience

2021-Current **Doctoral Researcher**, Knowledge Lab, University of Chicago. **Machine Learning Engineer**, Kakao Corp, South Korea.

Conference Presentations

Junsol Kim*, Byungkyu Lee. "AI-Augmented Surveys: Leveraging Large Language Models for Opinion Prediction in Nationally Representative Surveys." • American Sociological Association (ASA) Annual Meeting 2023 • International Conference on Computational Social Science (IC2S2) 2023

Junsol Kim*, Haohan Shi, Hsin-keng Ling, Zhao Wang, James Evans. (2023). "Informal Misinformation Flagging Reinforces Ideological Echo Chambers." • 2023 Plurality Research Network Conference

Junsol Kim*, Hsin-keng Ling, Haohan Shi, Zhao Wang, James Evans. (2023). "The Diffusion of Fake News in Policy." • *International Conference on the Science of Science and Innovation* (ICSSI) 2023

Skills

Programming Python: Deep Learning (Pytorch/Tensorflow/Transformers/Streamlit), Social

Network Analysis, Collaborative Filtering Algorithm

MATLAB: Neuroimaging Analysis (SPM), Functional Brain Connectivity Analysis

Stata and **R**: Causal Inference (Difference-in-Differences, Regession

Discontinuity, Instrumental Variable, Fixed-Effects Model)

Language English, Korean

Reference

James Evans
Max Palevsky Professor
Department of Sociology
University of Chicago
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Yoosik Youm Underwood Distinguished Professor Department of Sociology Yonsei University Email: yoosik@yonsei.ac.kr Assistant Professor Department of Sociology New York University Email: bklee@nyu.edu

Byungkyu Lee