TAEKHO YOU

Research Assistant Professor, Institute for Social Data Science, Pohang University of Science and Technology

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I. SUMMARY

I am interested in a broad range of scientific phenomena, especially for the academic system. I am trying to answer how the academic system is organized, how academic knowledge spreads, how researchers grow up and survive in academia, and how we use these understandings to make decision making. My research topic varies from modeling dynamics to data analysis.

Main Research Interest: Complex System, Computational Social Science, Science of Science, and its applications.
Main Methodology: Network analysis, Statistics, Game theory, Natural language processing, Diffusion Model, etc.

II. EDUCATION

Ph.D., Pohang University of Science and Technology   *Mar. 2014 - Feb. 2021*
Dissertation title: Bibliometric analysis on greedy strategy and evolution in academic system
Department of Industrial and Management Engineering
Advisor: Woo-Sung Jung

M.S., Pohang University of Science and Technology   *Mar. 2012 - Feb. 2014*
Thesis title: Development of a console layout optimizer considering ergonomic design characteristics
Department of Industrial and Management Engineering
Advisor: Heecheon You

B.S., Pohang University of Science and Technology   *Mar. 2007 - Feb. 2012*
Department of Industrial and Management Engineering

III. SCHOLARLY ACCOMPLISHMENT

Working papers

· **[3]** S. Park, S. Park, **T. You**, J. Yun (2024), Social Links vs. Language Barriers: Decoding the Global Spread of Streaming Content, (submitted, *KDD 2024*) (co-corresponding author with J. Yun).

· **[2]** **T. You**, J. Park, J. Y. Lee, J. Yun (2024), Regional profile of questionable publishing. (under review, *EPJ Data Science*), https://arxiv.org/abs/2312.07844.

· **[1]** **T. You**, J. Park, J. Y. Lee, J. Yun (2023). Auditing citation polarization during the early COVID-19 pandemic. (R&R, *Quantitative Science Studies*), https://arxiv.org/abs/2301.01926.

Journal Publications

· **[5]** **T. You**, J. Park, J. Y. Lee, J. Yun, W.-S. Jung (2022). Disturbance of questionable publishing to academia. *Journal of Informetrics, 16*(2), 101294.

· **[4]** **T. You**, O.-H. Kwon, J. Yoon, W.-S. Jung (2021). Tracing the evolution of physics with a keyword co-occurrence network. *Journal of the Korean Physical Society, 78*(3), 236-243.

· **[3]** **T. You**, W.-S. Jung (2018). A System Dynamics Analysis of National R&D Performance Measurement System in Korea, *Industrial Engineering & Management Systems, 17*(4), 833-839.

· **[2]** **T. You**, M. Kwon, H.-H. Jo, W.-S. Jung, S. K. Baek (2017). Chaos and unpredictability in evolution of cooperation in continuous time. *Physical Review E, 96*(6), 062310.

· **[1]** H. Kim, **T. You**, S.-J. Ahn, W.-S. Jung (2016). Embracing networks of national policy research in future foresight, *International Journal of Knowledge-Based Development, 7*, 107-124.

Conference Presentations

- [**8**] Understanding the Evolution of Western Painting Art Using the Stable Diffusion Model, *NetSciX 2024*, (2024).
- [**7**] Impact factor polarization during the COVID-19 pandemic, *The 27th International Conference on Science, Technology and Innovation Indicators (STI)* (2023).
- [**6**] Citation polarization during the COVID-19 pandemic, *9th International Conference on Computational Social Science* (2023).
- [**5**] Collective profile of questionable publishing, *The 26th International Conference on Science, Technology and Innovation Indicators (STI)* (2022).
- [**4**] Alliance structure between UN Security Council members with debates, *NetSci 2020* (2020).
- [**3**] Comparing quality of questionable journal in academic ecosystem, *NetSciX 2020* (2020).
- [**2**] A system dynamics of national R&D performance measurement system in Korea, *In Proceedings of the 2018 Spring Conference of Korean Institute of Industrial Engineers* (2018).
- [**1**] Chaos and unpredictability in evolution of cooperation in continuous time, *2017 Korean Physical Society Spring Meeting* (2017).

Patents

- [**1**] Method and system for representative keywords in research field using keyword cooccurrence analysis, **T. You**, O.-H. Kwon, J. Yoon, W.-S. Jung, Korean Patent No. 1024982940000 (2023). (granted)

IV. RESEARCH EXPERIENCES

Visiting Research Scholar, Luddy School of Informatics, Computing, and Engineering, Indiana University   *Aug. 2023 - Present*

Research assistant professor, Institute for Social Data Science, Pohang University of Science and Technology   *Jun. 2022 - Present*

Postdoctoral fellow, Soongsil University   *Mar. 2021 - Feb. 2022*

Visiting Scholar, Soongsil University   *Oct. 2020 - Feb. 2021*

V. RESEARCH FUNDING

POSTECH Alchemist, supported by Pohang University of Science and Technology   *Oct. 2022 - Oct. 2023*

Sejong science fellowship, supported by the National Research Foundation of Korea (NRF)   *Mar. 2022 - Present*

VI. OTHER PROJECT & TEACHING EXPERIENCES

ABM simulation of pedestrian dynamics in high school students
Mar. 2019 - Aug. 2019, at Pohangjecheol High School
Mathematical interpretation between two strategies in iterated Prisoners' Dilemma game
Mar. 2018 - Dec. 2018, at Pohangjecheol High School
TA: (IMEN491J) Special Lecture: Complex System Modeling and Simulation
Fall semester, 2015
TA: (IMEN491F) Entrepreneurship
Spring semester, 2014