

# TAEKHO YOU

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## I. SUMMARY

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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

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**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**

Department of Industrial and Management Engineering

## III. SCHOLARLY ACCOMPLISHMENT

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### Working papers

- [2] S. Park, S. Park, **T. You**, J. Yun (2024), Social Links vs. Language Barriers: Decoding the Global Spread of Streaming Content, (under review, *EPJ Data Science*) (co-corresponding author with J. Yun), <https://arxiv.org/abs/2402.19329>
- [1] **T. You**, J. Park, J. Y. Lee, J. Yun (2024), Regional profile of questionable publishing. (under review, *Scientometrics*), <https://arxiv.org/abs/2312.07844>.

### International Journal Publications

- [6] **T. You**, J. Park, J. Y. Lee, J. Yun (2024). Auditing citation polarization during the early COVID-19 pandemic. *Quantitative Science Studies*, 1-33.
- [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.

## International Conference Presentations

- [7] Understanding the Creativity through Evolution of Western Painting Art Using the Stable Diffusion Model, *10th International Conference on Computational Social Science* (2024). ([YouTube](#))
- [6] Understanding the Evolution of Western Painting Art Using the Stable Diffusion Model, *NetSciX 2024*, (2024).
- [5] Impact factor polarization during the COVID-19 pandemic, *The 27th International Conference on Science, Technology and Innovation Indicators (STI)* (2023).
- [4] Citation polarization during the COVID-19 pandemic, *9th International Conference on Computational Social Science* (2023). ([YouTube](#))
- [3] Collective profile of questionable publishing, *The 26th International Conference on Science, Technology and Innovation Indicators (STI)* (2022).
- [2] Alliance structure between UN Security Council members with debates, *NetSci 2020* (2020).
- [1] Comparing quality of questionable journal in academic ecosystem, *NetSciX 2020* (2020).

## Patents

- [1] Method and device for extracting key keywords based on keyword joint appearance network, **T. You**, O.-H. Kwon, J. Yoon, W.-S. Jung, Korean Patent No. 1024982940000 (2023). (granted)

## IV. RESEARCH EXPERIENCES

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**Visiting Research Scholar**, Luddy School of Informatics, Computing, and Engineering, Indiana University  
Aug. 2023 - Jul. 2024

**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

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**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. PROFESSIONAL SERVICES

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**Reviewer**: PLOS One, EPJ Data Science, Humanities and Social Sciences Communications

**Seminar Organizer**: Complex Systems Research Exchange ([CREX](#))

## VII. OTHER PROJECT & TEACHING EXPERIENCES

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**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