Lili Miao

CONTACT Information Luddy School of Informatics, Computing, and Engineering

Luddy Center for Artificial Intelligence, 1015 E 11th st.

Indiana University Bloomington

Bloomington, IN 47408

EDUCATION

Ph.D. Informatics, Indiana University, Bloomington, IN, USA

• Advisor: Professor Yong-Yeol Ahn; Professor Cassidy R. Sugimoto

August 2018-present

M.S. Informatics, Indiana University, Bloomington, IN, USA

• Advisor: Professor Cassidy R. Sugimoto

August 2016-August 2018

B.S. Computer Science, University of Electronic Science and Technology of China, Chengdu,

China

• Advisor: Professor Tao Zhou

August 2010-August 2014

RESEARCH INTERESTS

Science of Science, Science & Policy, Science & Economics, Computational Social Science

ACADEMIC Positions

Indiana University, Bloomington, IN, USA

Research Assistant, Department of Informatics

July 2016-present

Centre for Science and Technology Studies, Leiden, Netherlands

Visiting Student

Research Assistant

June 2018–July 2018

June 2015–May 2016

University of Electronic Science and Technology of China, Chengdu, China

Research Assistant

New England Complex Systems Institute, Boston, MA, USA

June 2014–May 2015

Publications

Articles

- [A1] Lili Miao, Dakota Murray, Woo-Sung Jung, Vincent Larivière, Cassidy R. Sugimoto, and Yong-Yeol Ahn. "The latent structure of national scientific development". In: *Nature Human Behaviour* 6 (2022), pp. 1206–1217. DOI: 10.1038/s41562-022-01367-x. arXiv: 2104. 10812 [cs.SI].
- [A2] Lili Miao, Vincent Larivière, Feifei Wang, Yong-Yeol Ahn, and Cassidy R. Sugimoto. "Cooperation and dependence in global science funding landscape". (to be submitted soon, shareable upon request).
- [A3] Zaida Chinchilla-Rodrìguez, Lili Miao, Nicolàs obinson-Garcìa Dakota Murray, Rodrigo Costas, and Cassidy R. Sugimoto. "A global comparison of scientific mobility and collaboration according to national scientific capacities". In: Frontiers in research metrics and analytics 3 (2018), p. 17.
- [A4] Jing Zhao, **Lili Miao**, Jian Yang, Haiyang Fang, Qianming Zhang, Min Nie, Petter Holme, and Tao Zhou. "Prediction of links and weights in networks by reliable routes". In: *Scientific reports* 5.1 (2015), pp. 1–15.
- [A5] Zaida Chinchilla-Rodrìguez, Lili Miao, Nicolàs obinson-Garcìa Dakota Murray, Rodrigo Costas, and Cassidy R. Sugimoto. "Networks of international collaboration and mobility: a comparative study". In: Proceedings of the Sixteenth International Conference on Scientometrics Informetrics. Wuhan, China, Oct. 2017.

[A6] Lili Miao, Qianming Zhang, Dacheng Nie, and Shimin Cai. "Whether information network supplements friendship network". In: *Physica A: Statistical Mechanics and its Applications* 419 (2015), pp. 301–306.

Working In Progress

- [W1] A large-scale analysis of national scientific workforce. (Lead author; with Vincent Larivière, Cassidy R. Sugimoto, Yong-Yeol Ahn; Representative work).
- [W2] Scientific backbone of tehcnology. (Adavisor: Staša Milojević).
- [W3] Global situation awareness of science and technology capabilities. (Coauthor; with Filipi Nascimento Silva, Sadamori Kojaku, Yong-Yeol Ahn).

SELECTED TALKS Conference talks

- [C1] Lili Miao, Vincent Larivière, Feifei Wang, Cassidy R. Sugimoto, and Yong-Yeol Ahn. Cooperation and dependence in global science funding. Atlanta, USA: ATLC2023, 2023.
- [C2] Lili Miao, Dakota Murray, Woo-Sung Jung, Vincent Larivière, Cassidy R. Sugimoto, and Yong-Yeol Ahn. The latent structure of national scientific development. virtual: NetSci2020, 2021.
- [C3] Lili Miao, Dakota Murray, Woo-Sung Jung, Vincent Larivière, Cassidy R. Sugimoto, and Yong-Yeol Ahn. *The latent structure of national scientific development*. Burlington, Vermont, USA: NetSci2019, 2019.
- [C4] Lili Miao, Dakota Murray, Zaida Chinchilla-Rodrìguez, Vincent Larivière, and Cassidy R. Sugimoto. *Glass boundaries: Differences in interdisciplinarity between men and women*. Paris, France: STI2017, 2017.
- [C5] Zaida Chinchilla-Rodrìguez, Lili Miao, Nicolàs obinson-Garcìa Dakota Murray, Rodrigo Costas, and Cassidy R. Sugimoto. A large-scale comparison of the position of countries in international collaboration and mobility according to their scientific capacities. Paris, France: STI2017, 2017.

Invited seminars

JiZhi center for Natural Science Research, China

10/14/2022

Service Reviewer

• PLoS ONE, Complexity, Technovation, ISSI: 2023

Awards and Fellowships

List of awards and fellowships

- Excellence in Research, Luddy School of Informatics, Computing, and Engineering, 2021-2022
- Best Poster Award, International Conference on The Science of Science & Innovation, 2022
- National Science Foundation Research Traineeship Fellowship, Complex Networks and System, Indiana University, 2019