Yongren Shi

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Personal webpage: https://sociology.uiowa.edu/people/yongren-shi

Updated July, 2024

Academic Assistant Professor 2018 -

Positions Department of Sociology and Criminology

The University of Iowa

Fellow in Residence 2023 Summer

Public Policy Center The University of Iowa

Post-Doctoral Research Associate 2016 - 2018

Yale Institute for Network Science

Education Cornell University

> 2016 Ph.D. in Sociology,

> Committee: Michael W. Macy (Chair), Douglas D. Heckathorn, Edward

J. Lawler.

Huazhong University of Science and Technology

Master of Engineering, 2007 Bachelor of Engineering, 2005

Research Culture; Public Opinions; Social Networks; Group Processes; Organizations; Social Psychology; Computational and Quantitative Methods; Interests

Mathematical Sociology.

Publications

Peer-Reviewed Shi, Yongren, Kevin Kiley, and Stephanie DiPietro. Forthcoming. "To the Extreme: A Descriptive Exploration of the Rise of a Radical Culture in a Misogynist Digital Community." Socius: Sociological Research for a Dynamic World

> Lynn, Freda B., Yongren Shi, and Kevin Kiley. 2024. "Intersectional Group Agreement on the Occupational Order." Social Psychology Quarterly https://doi.org/10.1177/01902725241256378

Sauder, Michael E.*, **Yongren Shi***, and Freda B. Lynn. Forthcoming. "Multiple Meritocracies: A Text-Based Analysis of Personal Narratives Revealing Distinct Frames of Success" *RSF: The Russell Sage Foundation Journal of the Social Sciences* (* Equal contribution)

Jarratt, Lindsay, Freda B. Lynn, **Yongren Shi** and Katharine M. Broton. 2024. "Up-or-Out Systems? Majors, Path Flexibility, and College Attainment" *Research in Higher Education* DOI: 10.1007/s11162-024-09789-4

Qianyi Shi* and **Yongren Shi***. 2023. "Distinguishing Social Mechanisms of Membership Adoption in Emerging Technology Communities" *Social Science Research* 114:102917. doi: 10.1016/j.ssresearch.2023.102917. (* Equal contribution).

Shi, Yongren and Qianyi Shi. 2023. "The Social Overload Thesis Revisited: Exploring the Mechanisms of Size-dependent Participation Behavior in Voluntary Communities" *Socius: Sociological Research for a Dynamic World* Volume 9: 121. doi:10.1177/23780231231209140

Sirianni, Antonio, Christopher J. Cameron, **Yongren Shi**, and Douglas D. Heckathorn. 2021. "Bias Decomposition and Estimator Performance in Respondent-Driven Sampling." *Social Networks* 64: 109-121. doi: 10.1016/j.socnet.2020.08.002

Shi, Yongren, Chris Cameron and Douglas Heckathorn. 2019. "Model-based and Design-based Inference: Reducing Bias Due to Differential Recruitment in Respondent-Driven Sampling." *Sociological Methods and Research* vol. 48(1), 3-33. doi.org/10.1177/0049124116672682

Shi, Yongren, Craig E. Pollack, Pamela R. Soulos, Jeph Herrin, Nicholas A. Christakis, Xiao Xu, and Cary Gross. 2019. "Association Between Degrees of Separation in Physician Networks and Surgeons Use of Perioperative Breast Magnetic Resonance Imaging." *Medical Care* vol. 57(6): 460-467. doi: 10.1097/MLR.00000000000001123

Shi, Yongren, Yisook Lim and Chan S. Suh. 2018. "Between Deviation and Innovation: Boundary Crossing and Audience Evaluation in the Music Field." *Plos One* https://doi.org/10.1371/journal.pone.0203065

Behler, Rachel, Chan S. Suh, Matthew E. Brashears and **Yongren Shi**. 2018. "Familiar Faces, Familiar Spaces: Social Similarity and Co-Presence in Non-Relational Behavioral Convergence." *Network Science* 6(3), 396-429. doi:10.1017/nws.2018.12

Shi, Yongren, Fedor Dokshin, Michael Genkin and Matthew E. Brashears. 2017. "A Member Saved is a Member Earned? The Recruitment-

Retention Trade-Off and Organizational Strategies for Membership Growth." American Sociological Review 82(2): 407 - 434. DOI: 10.1177/0003122417693616

Feng Shi*, Yongren Shi*, Fedor Dokshin, Michael W. Macy and James Evans. 2017. "Millions of Online Book Co-purchases Reveal Partisan Differences in the Consumption of Science." *Nature Human Behaviour* doi:10.1038/s41562-017-0079 (Cover Article) (* co-first authors with equal contribution).

- "How to judge a book by its network." editorial *Nature* 544, 5-6.
- Selected media coverage: The Guardian, Wired, The LA Times, Scientific American, Harvard Business Review, The Huffington Post, phys.org, UChicago News, Cornell Chronicle, Nature Asia, the Australian.
- According to Altmetric, the paper ranks above 99% of all the contemporaries in media coverage. www.altmetric.com/details/18460745

Suh, Chan S., **Yongren Shi** and Matthew E. Brashears. 2017. "Negligible Connections? The Role of Familiar Others in the Diffusion of Smoking among Adolescents." *Social Forces* 96(1): 423 - 448. doi: 10.1093/sf/sox046

Shi, Yongren, Kai Mast, Ingmar Weber, Agrippa Kellum and Michael W. Macy. 2017. "Cultural Fault Lines and Political Polarization." in *Proceedings of the ACM Conference on Web Science*: doi: 10.1145/3091478.3091520.

• Website: lifestyle-politics.com

Shi, Yongren and Michael W. Macy. 2016. "Measuring Structural Similarity in Large Online Networks" *Social Science Research* 59:97-106. doi:10.1016/j.ssresearch.2016.04.021

DellaPosta, Daniel, **Yongren Shi** and Michael W. Macy. 2015. "Why Do Liberals Drink Lattes?" *American Journal of Sociology* 120(5):1473-1511. doi.org/10.1086/681254

- Outstanding Article Publication Award at the Mathematical Sociology Section, American Sociological Association.
- Press coverage: BBC News, Boston Globe, National Affairs, London School of Economics, TheSocietyPage, ChinaDaily.

Shi, Yongren, Liang Gao and Jiang Zhang. 2006. "Agent-Based Computational Economics and its Application in Supply Networks" *Complex Systems and Complexity Science* Vol.3: 69-76. (in Chinese)

Other Publications

Shi, Yongren. 2022. Book review of Michael H. Gavins book *The New*

White Nationalism in Politics and Higher Education: The Nostalgia Spectrum. in Contemporary Sociology: A Journal of Reviews.

Shi, Yongren. 2020. Review of Yanjie Bian's book *Guanxi: How China works*. in *Work and Occupations*.

Kitts, James and **Yongren Shi**. 2018. "Toward an Analytic Framework of Social Influence: Behavioral Diffusion." Invited contribution for the *National Academy of Science*.

Shi, Yongren. 2018. "Culture, Opinions and Social Influence." Book chapter in *Computational Social Science: Social Science Research in the Digital Age* Zhejiang Publishing Group (in Chinese).

Heckathorn, Douglas D., Christopher Cameron, and **Yongren Shi**. 2014. Respondent-Driven Sampling: Origins, Current Developments, and Alternative Estimators. By *Proceedings of the International Methodology Symposium 2013*, Statistics Canada, Ottawa.

Shi, Yongren. 2007. "Is it Possible to Create Life in Computer?" Review of the Book *Digital Genesis - The New Science of Artificial Life*. Studies in Dialectics of Nature Vol. 23: 44-49. (in Chinese)

Shi, Yongren, Liang Gao and Jiang Zhang. 2006. "Agent-Based Computational Economics and its Application in Supply Networks" *Complex Systems and Complexity Science* Vol.3: 69-76. (in Chinese)

Shi, Yongren, Jiang Zhang, Liang Gao and Chi Zhou. 2006. "Scale-Free Networks Emerge out of Micro-Mechanism in an Agent-based Computational Economic Model." In *Proceedings of the IEEE Conference on Computational Cybernetics*.

External Grants

National Science Foundation. "RII Track-2 FEC: Data-Advanced Research and Education (DARE) to improve weather intelligence and localized climate change assessment and resilience in ag-based communities." Role: co-investigator, with Jun Wang (PI) and others. Total amount: \$5,999,700 2025-2029

National Science Foundation. "Group Processes Underlying Behavioral Deviance in Online Public Spaces" (2048670) Role: PI. Total amount: \$263,330. 2021-2024

General Research Fund of Hong Kong. "Mapping the Status of Political Incivility in Hong Kong's Digital Space: From the Umbrella Movement to the Anti-Extradition Protests." Role: co-investigator, with Celine Yunya

Song (PI). Total amount: \sim HK\$396,720.

2021-2022

National Science Foundation. "Mapping the Many Pathways (In and Out) of the Post-secondary STEM Pipeline." Role: co-PI, with Freda Lynn (PI) and Katharine Broton (co-PI). Total amount: \$233,989. 2019-2021

Amazon Web Service in Education Research Grant. Role: PI. 2015

National Science Foundation Doctoral Dissertation Research Improvement Grant. "Examining Social Clustering and Division via Patterns of Purchasing and Reviewing." Role: co-PI, with Michael W. Macy (PI). Total amount: \$11,938.

Internal Grants Office of the Executive Vice President and Provost - "Curricular Analytics: Identifying and Addressing Bottlenecks to Improve Student Retention and Timeliness to Degree." (with Freda Lynn and Lindsay Jarratt) Total amount: \$105,000.

Office of the Executive Vice President and Provost - Investment in Strategic Priorities. Total amount: \$5,000.

International Program - Summer Research Fellowship. Total amount: \$3,000. 2023-2024

Office of the Vice President for Research - Seeding Excellence: DEI Supplements. "Qualitative Analyses of Threaded Conversations in Deviant Online Communities" Total amount: \$25,000. 2022-2023

Iowa Center for Research, Undergraduates Research Fellowship, student advisee: Allyson Stoops. 2022-2023

Grant Writing Support Summer Program. "Understanding Membership Dynamics and Transformation of Online Deviant Groups" Department of Sociology, University of Iowa.

2019

Digital Humanities Laboratory Corpus Creation Seed Grant. Yale University \$1500.

Awards and Fellowship

Old Gold Summer Fellowship. University of Iowa.

2019

Travel Award. Paul and Marcia Wythes Center on Contemporary China, Princeton University. 2018

Outstanding Article Publication Award of Mathematical Sociology Section, American Sociological Association. 2016

Dissertation-in-Progress Award of Mathematical Sociology Section, Amer-

ican Sociological Association.

2016

Sage Fellowship, Cornell University.

2015-2016; 2007-2009

Graduate School Travel Awards, Cornell University.

2013; 2016

Chinese Government Award for Outstanding Students Studying Abroad, Chinese Consulate at New York City. \$6,000.

Excellence in Graduation Thesis Award in Hubei Province, China. 2007

Fellowship in Complex System Summer School, Santa Fe Institute, Beijing, China.

Invited Talks

"Beyond Social Survey: Millions of Online Book Co-purchases and Reviews Reveal New Battlefields in Culture Wars." AI Youth Camp (Iowa City, Iowa).

June, 2024

"Network-based Interventions" Nanhuan Shiyan Middle School (Suzhou, China).

June, 2024

"Interaction Rituals and Opinion Radicalization in Online Public Conversations" Public Policy Center, University of Iowa. April, 2023

"Interaction Rituals and Opinion Radicalization in Online Public Conversations" Peking University, Beijing, China. May, 2022

"Beyond Social Survey: Millions of Online Book Co-purchases and Reviews Reveal New Battlefields in Culture Wars" Hong Kong University of Science and Technology (Hong Kong)

Jun., 2021

"Through the Lens of Multiple Networks: How Institutions and Infrastructure Shape Network Structure." Duke Network Analysis Center. (Durham, North Carolina).

Oct., 2019

"Evolution and Turnover of Online Social Groups" IBS AI+X Forum, Institute for Basic Science (Daejon, Korea).

June, 2019

"Evolution and Turnover of Online Social Groups" The 2019 World Congress Korea, Konkuk University (Seoul, Korea).

June, 2019

"Social Networks in Rural Honduras," Kohn Colloquium, Department of Geographical and Sustainability Sciences, University of Iowa (Iowa City, IA).

Mar., 2019

"Social Networks and Big Data," Cosponsored by Tencent Research Institute and the Swarma Club (Shenzhen, China).

Nov., 2017

"The Structure and Function of Multiplex Social Networks," University of Iowa (Iowa city, IA).

Nov., 2017

"Multiplexity Matters,"

Harvard University (Cambridge, MA);

University of Indiana, Bloomington (Bloomington, IN);

University of Toronto (Canada);

Chinese University of Hong Kong (HK, China);

Stanford University (Stanford, CA). Nov.-Dec., 2017

"Robot-Human Interactions in Social Network Experiments," School of Public Policy and Management, Tsinghua University (Beijing, China). Jul., 2017

"Computational Social Science" Department of Sociology, Shanghai University (Shanghai, China). Jul., 2017

"Can We Agree on Science? Millions of book co-purchases reveal the political alignment and polarization of U.S. science." Department of Sociology, the University of Iowa (Iowa City, IA). Feb., 2016

Colloquium **Presentations** (selected)

Conference and "Beyond Statistical Variables: Examining the Duality of Persons and Groups in Structuring Opinion Space" American Sociological Association Annual Meeting. Montreal, Canada. Aug., 2024

> "Using Affect Control Theory to Understandone Moral Evaluation" American Sociological Association Annual Meeting. Philadelphia, PA. (with Regan Smock.) Aug., 2023

> "Conversational Processes of Opinion Radicalization in a Digital Community" American Sociological Association Annual Meeting, Los Angeles, CA. Aug., 2022

> "Why are Members More Active in Larger Voluntary Communities? Niche Competition and Size-dependent Behavior" American Sociological Association Annual Meeting, Los Angeles, CA. Aug., 2022

> "Conversational Processes of Opinion Radicalization in a Digital Community" International Conference on Computational Social Science, Chicago, IL. July, 2022

> "Two Wrongs Sometimes Make a Right: Morality, Interaction, and Assholes" with Steven Hitlin. Departmental Colloquium, Department of Sociology and Criminology (Iowa City, IA) Jan., 2022

> "Structural Variation of Social Networks in Rural Honduras," Paul and Marcia Wythes Center on Contemporary China, Princeton University (Princeton, NJ). Aug., 2018

> "Tie Multiplexity, Network motifs and Health Knowledge in Rural Honduras." Human Nature Lab (New Haven, CT). Feb., 2017

"Connections and Commitment: The Recruitment-Retention Trade-Off and Organizational Strategies for Membership Growth." Human Nature Lab (New Haven, CT).

Nov., 2016

"How are music genres perceived and reconstructed in the consumer market?" INSNA Sunbelt Conference (Newport Beach, CA). Apr., 2016

"How are music genres perceived and reconstructed in the consumer market?" Cornell Sociology Research Symposium (Ithaca, NY). Mar., 2016

"Studies of Political and Cultural Polarization Using Online Datasets." Yale Institute for Network Science (New Haven, CT).

Nov., 2015

"Pulp Friction: Book Co-Purchasing Patterns of Conservative and Liberal American." Brown Bag Series Talk, Department of Sociology, Cornell University. (Ithaca, NY).

Nov., 2014

"Is Greed Good? An Ecological Analysis of Organizational Membership." American Sociological Association, Mathematical Sociology Section (San Francisco, CA).

Aug., 2014

"Is Greed Good? An Ecological Analysis of Organizational Membership." Sunbelt Conference (St. Peter, FL). Feb., 2014

"Network Autocorrelation and Opinion Dynamics," Graduate Student Mini-conference, Department of Sociology. (Ithaca, NY). 2011

Teaching Experiences

University of Iowa

- Contemporary Social Problems (undergraduate)
- Data Science for Social Good (undergraduate)
- Social Research Methods: Big Data (graduate)
- Linear Models in Sociological Research (graduate)

2018-

New York University Shanghai and Shanghai University

- Introduction to Computational Social Science
- Quantitative Textual Analysis

Summer 2019,2020,2021

Renmin University of China

• Big Data in Social Science Research

Summer 2019, 2020

Professional Services and Activities

Departmental and University Services

- Department Executive Committee (elected) (2024-2025)
- Faculty Senate (elected) (2022-2025)
- Diversity and Inclusion (2023-2024)

- Graduate Admission (2022-2023)
- Graduate Study (2021-2022)
- Diversity and Inclusion Committee (2020-2021)
- Department Executive Committee (elected) (2019-2020)
- Computer Committee (2019-)
- Digital Scholarship and Publishing Studio's Faculty Committee (2019-2020)

External Service

- 2024-2027. Council member (elected): Mathematical Sociology Section, ASA.
- 2024. Committee chair: Graduate Student Best Paper Award, Altruism, Morality and Solidarity Section, ASA.
- 2024. Committee member: Outstanding Article Publication Award, Mathematical Sociology Section, ASA, 2024.
- 2023-2025. Council member (elected): Altruism, Morality and Solidarity Section, ASA.
- 2023. Co-organizer: Summer Institute for Computational Social Science. NYU Shanghai.
- 2023. Committee member: Outstanding Article Publication Award, Mathematical Sociology Section, ASA.
- 2023. Committee member: Clifford Geertz Prize for Best Article committee, Sociology of Culture section, ASA.
- 2022. Panelist: National Science Foundation, the Secure and Trustworthy Cyberspace (SaTC) program.
- 2022. Committee chair: Graduate Student Affairs Committee, Social Psychology Section, ASA.
- 2021-2022. Mentor: the ASA Methodology Section mentoring program.
- 2021. Committee member: Clifford Geertz Prize for Best Article committee, Sociology of Culture section, ASA.
- 2021. Panelist: National Science Foundation, the Secure and Trustworthy Cyberspace (SaTC) program.
- 2021. Program committee member. 7th International Conference on Computational Social Science.
- 2021. Committee member: Graduate Student Affairs Committee, Social Psychology Section, ASA.

- 2021. Committee member: Dissertation-in-Progress Award, Mathematical Sociology Section, ASA.
- 2020. Program committee member. 6th International Conference on Computational Social Science.
- 2020. Committee member: Dissertation-in-Progress Award, Mathematical Sociology Section, ASA.
- 2019. Proposal reviewer for the National Science Foundation SciSIP Program.
- 2019. Program committee member. 5th International Conference on Computational Social Science.
- 2018. Committee member: Dissertation-in-Progress Award, Mathematical Sociology Section, ASA.
- Occasional reviewer for academic journals:
 - 2024 Scientific Report
 - 2024 Social Science Research
 - 2024 Sociological Methods and Research
 - 2024 American Journal of Sociology
 - 2024 Poetics ($\times 2$)
 - 2024 Computers in Human Behavior
 - 2024 Proceeding of National Academy of Science
 - 2023 Mass Communication and Society
 - 2023 Social Science Research ($\times 2$)
 - 2023 American Journal of Sociology ($\times 2$)
 - 2022 Social Science Research
 - 2022 Sociological Methods and Research
 - 2022 American Sociological Review
 - 2022 American Journal of Sociology
 - 2021 American Sociological Review
 - 2021 Social Networks
 - 2021 Proceeding of National Academy of Science
 - 2021 Socius
 - 2021 Plos One
 - 2021 Chinese Sociological Review
 - 2020 Management Science
 - 2020 Proceeding of National Academy of Science
 - 2020 Science Advances
 - 2020 Sociological Forum
 - 2020 American Journal of Sociology ($\times 2$)
 - 2020 American Sociological Review (\times 2)
 - 2020 Social Forces

- 2020 Social Psychological Quarterly
- 2020 Social Science Research ($\times 2$)
- 2020 Transactions on Social Computing
- 2019 Political Behavior
- 2019 Social Psychological Quarterly
- 2019 The Social Science Journal
- 2019 American Sociological Review ($\times 2$)
- 2019 Social Science Journal
- 2019 Sociological Forum
- 2019 American Journal of Sociology
- 2018 Social Science Computer Review
- 2018 American Journal of Sociology (×2)
- 2018 Sociological Methods and Research
- 2018 American Sociological Review
- 2018 Public Opinion Quarterly

Book Manuscripts Reviewing (invited):

- 2021 You May Ask Yourself by Dalton Conley; W.W. Norton & Company.
- 2021 Coding Social Science by Matti Nelimarkka; Sage Publishing.
- 2020 Doing Computational Social Science by John McLevey; Sage Publishing.

Consultancy:

- Exposure Promotions Limited, Cruise Mates: The Science. 2017
- Center of Disease Control and Prevention (CDC), Respondent Driven Sampling Analysis Tool (RDSAT) Development and SAS Interface.
 PI. Douglas Heckathorn.

Post-doctoral Scholar Advising:

• Kevin Kiley (2021-2022)

Graduate Students Advising:

- Qianyi Shi (Dissertation Committee: co-chair. Sociology.)
- Hannah Espy (Dissertation Committee: member. Sociology.)
- SuYeong Shin (Dissertation Committee: member. Education.)
- Inga Popovaite (Dissertation Committee: member. Sociology.)
- Sulyun Lee (Dissertation Committee: member. Informatics.)
- Regan Smock (Master Thesis: chair. Sociology.)
- Chanhum Yoon (Master Thesis Committee: co-chair. Sociology.)

- Levi Sands (Master Thesis Committee: member. Sociology.)
- Kelci Mueller (Research assistant advisor. Sociology.)

Comprehensive Exam Committee:

- Maryam Torkashvand (Kinship networks and migration)
- Solomon R. Fenton-Miller (Textual analysis)
- Andrea Smith (Culture)
- Hyunsik Chun (Organization)
- Hannah Espy (Social networks)
- Sulyun Lee (Informatics)

Undergraduate Students Advising:

- Yuxin Li (Summer internship advisor)
- Regan Smock (Research assistant advisor)
- Linh T. Pham (Research assistant advisor)
- Zoe J. Day (Research assistant advisor)
- Dena Pyevich (Research assistant advisor)
- Allyson Stoops (ICRU Fellowship advisor)
- Hannah Zadeh (Senior thesis reader)

Memberships American Sociological Association

2010-

International Association of Chinese Sociologist

2017-2018

References Available Upon Request