Yian Yin

CONTACT INFORMATION	**Northwestern University**	*Email*: yianyin@u.northwestern.edu
	Center for Science of Science and Innovation	*Website*: https://www.yianyin.net
	Northwestern Institute on Complex Systems	*Voice*: 425-209-5518
	600 Foster Street, Evanston, IL 60208	Updated May 2022

ACADEMIC POSITIONS

Cornell University, Ithaca, NY, USA
Assistant Professor, Jul 2023 –
Information Science, Bowers College of Computing & Information Science

Northwestern University, Evanston, IL, USA
Research Assistant Professor, Jul 2022 – Jun 2023
Management & Organizations, Kellogg School of Management

Research Fellow, Sep 2019 –
Center for Science of Science & Innovation

Researcher in Residence, Aug 2016 –
Northwestern Institute on Complex Systems

Microsoft Research, Redmond, WA, USA
Visiting Researcher, Oct 2018 – Nov 2018
Microsoft Academic Graph Analytics

Pennsylvania State University, University Park, PA, USA
Visiting Scholar, Jul 2015 – Oct 2015
College of Information Sciences & Technology

Peking University, Beijing, China
Undergraduate Research Assistant, May 2014 – Jun 2016
Center for Information Sciences

EDUCATION

Northwestern University, Evanston, IL, USA
Ph.D., Industrial Engineering & Management Sciences Expected 2022
McCormick School of Engineering & Applied Sciences
Committee: Noshir Contractor[chair], Dashun Wang[co-chair], Jorge Nocedal
M.Sc., Industrial Engineering & Management Sciences Dec 2017

Peking University, Beijing, China
B.Sc., Statistics Jun 2016
School of Mathematical Sciences
B.Ec., Economics Jun 2016
National School of Development

SELECTED AWARDS

- Top 25 Papers in Social Sciences and Human Behaviour, Nature Communications 2022
- Rising Star in Data Science (Spotlight), University of Chicago 2021
- Complex Systems Scholarship, Young Researchers in Complex Systems Society 2021
- Best Reviewer, ICWSM: International AAAI Conference on Web and Social Media 2021
- Best Reviewer, AOM Technology and Innovation Management 2021
- Top 100 Most-discussed Papers across All Sciences, Altmetric.com 2020
- Conference Scholarship, Network Science Society Conference 2020
- Young Network Scientist Award, Society of Young Network Scientists 2017
- Graduate Fellowship, Northwestern University 2016

PUBLICATIONS   ¶: equal contributions. ‡: students I have mentored.

JOURNAL
PUBLICATIONS

[1] Jian Gao, **Yian Yin**, Kyle R. Myers, Karim R. Lakhani & Dashun Wang (2021)
Potentially long-lasting effects of the pandemic on scientists
Nature Communications, **1**, 12: 6188. 10.1038/s41467-021-26428-z

[2] **Yian Yin**¶, Jian Gao¶, Benjamin F. Jones & Dashun Wang (2021)
Coevolution of policy and science during the pandemic
Science, **371**, 6525: 128–130. 10.1126/science.abe3084

[3] Kyle R. Myers, Wei Yang Tham, **Yian Yin**, Nina Cohodes, Jerry G. Thursby, Marie C. Thursby,
Peter Schiffer, Joseph T. Walsh, Karim R. Lakhani & Dashun Wang (2020)
Unequal effects of the COVID-19 pandemic on scientists
Nature Human Behaviour, **4**, 9: 880–883. 10.1038/s41562-020-0921-y

[4] Jichao Li‡, **Yian Yin**, Santo Fortunato & Dashun Wang (2020)
Scientific elite revisited: Patterns of productivity, collaboration, authorship and impact *Journal
of the Royal Society Interface*, **17**, 165: 20200135. 10.1098/rsif.2020.0135

[5] **Yian Yin**, Yang Wang, James A. Evans & Dashun Wang (2019)
Quantifying the dynamics of failure across science, startups and security
Nature, **575**, 7781: 190–194. 10.1038/s41586-019-1725-y

[6] Jichao Li‡, **Yian Yin**, Santo Fortunato & Dashun Wang (2019)
Nobel laureates are almost the same as us
Nature Reviews Physics, **1**, 5: 301–303. 10.1038/s42254-019-0057-z

[7] Jichao Li‡, **Yian Yin**, Santo Fortunato & Dashun Wang (2019)
A dataset of publication records for Nobel laureates
Scientific Data, **6**, 1: 33. 10.1038/s41597-019-0033-6

[8] **Yian Yin** & Dashun Wang (2017)
The time dimension of science: Connecting the past to the future
Journal of Informetrics, **11**, 2: 608–621. 10.1016/j.joi.2017.04.002

WORKING
PAPERS

[9] **Yian Yin**, Yuxiao Dong, Kuansan Wang, Dashun Wang & Benjamin F. Jones (2022)
Public use and public funding of science
NBER Working Paper w28748

[10] Ryan R. Hill¶, **Yian Yin**¶, Carolyn Stein¶, Dashun Wang & Benjamin F. Jones (2022)
Adaptability and the pivot penalty in science and technology
SSRN 3886142, in submission.

[11] Zihang Lin‡, **Yian Yin**, Lu Liu & Dashun Wang (2022)
SciSciNet: A large-scale open datalake for the science of science

SELECTED
WORK IN
PROGRESS

[12] **Yian Yin** & Dashun Wang
Quantifying punctuated record-breaking dynamics

[13] **Yian Yin** & Dashun Wang
Universal limits of learning

[14] Yang Wang, **Yian Yin**, Lu Liu & Dashun Wang
Funding and the end of hot streaks in scientific careers

[15] Alexander C. Furnas, Jian Gao, **Yian Yin** & Dashun Wang
The political mobilization of scientists in the United States

PATENTS	[16]	Dashun Wang, **Yian Yin**, Yang Wang & James A. Evans System and method to predict success based on analysis of failure US Patent Application 17/061,112	
GRANTS	[1]	SICSS Seed Research Grant, **$2,000** Structures and dynamics of package ecosystems	*Principal Investigator* 2018/08
	[2]	Minerva Research Initiative, **$309,562** Quantifying the effects of COVID-19 pandemic on scientific workforce	*Proposal lead writer* 2020/05
	[3]	Social Science Research Council, **$8,200** 4th Summer Institute in Computational Social Science Chicago	*Organizer* 2021/02
	[4]	Peter G. Peterson Foundation, **$150,000** Developing a quantitative framework to track and assess state-level policy responses to the COVID-19 pandemic	*Proposal lead writer* 2021/04

TEACHING	**Summer Institute in Computational Social Science (SICSS)**, Chicago, IL	*Instructor*

Lectures in Computational Social Science
- SICSS-Chicago 2021, 30 students from social and computational science.

Northwestern University, Evanston, IL	*Teaching Assistant*

Social Dynamics & Networks (MORSX 945)
- Winter 2022, EMBA course at Kellogg School of Management.

Social Dynamics and Network Analytics (MORS 457)
- 9 sessions (2017-2022), MBA course at Kellogg School of Management.

Human and Machine Intelligence (MORS 950)
- Spring 2021, MBA course at Kellogg School of Management.

Statistical Decision Analysis (MECNX 434)
- Winter 2018, EMBA core course at Kellogg School of Management.

Data Science and Programming Workshops
- Summer 2018, serial workshop by Northwestern Research Computing.

TALKS	1. Invited talk, INFORMS Annual Meeting Indianapolis, IN	Forthcoming
	2. International Conference on the Science of Science and Innovation (ICSSI) Washington, DC	Forthcoming
	3. Invited talk, School of Public Policy Georgia Institute of Technology (online)	2022/04
	4. Invited talk, School of Computer Science Seminar Carnegie Mellon University, Pittsburgh, PA	2022/03
	5. Invited talk, Data Science Seminar University of California San Diego (online)	2022/03
	6. Invited talk, Institute for Computational and Data Sciences Seminar Pennsylvania State University (online)	2022/03
	7. Invited talk, Information Science Colloquium Cornell University, Ithaca, NY	2022/03

8. Invited talk, Interactive Computing Seminar
   Georgia Institute of Technology (online)   2022/02

9. Invited talk, Information Sciences Seminar
   University of Illinois at Urbana-Champaign (online)   2022/02

10. Invited talk, Computational Social Science Seminar
    University of Pittsburgh (online)   2022/02

11. Invited talk, Engineering Management and Systems Engineering Seminar George
    Washington University (online)   2022/02

12. Invited talk, Industrial Engineering Seminar
    Purdue University (online)   2022/01

13. Invited talk, Mechanical and Industrial Engineering Seminar
    University of Toronto (online)   2022/01

14. Invited talk, System Dynamics Group Seminar
    MIT Sloan School of Management, Cambridge, MA   2021/12

15. Invited talk, Sociology Department Colloquium
    University of Chicago, Chicago, IL   2021/11

16. Invited talk, Mangement & Organizations Seminar
    NYU Stern School of Business (online)   2021/11

17. Invited talk, Sociology Department Seminar
    Purdue University (online)   2021/11

18. INFORMS Annual Meeting
    Anaheim, CA   2021/10

19. Harvard Business School Digital Doctoral Workshop
    Boston, MA (online)   2021/09

20. Minerva Research Network Workshop
    Wautoma, WI   2021/08

21. International Conference on Computational Social Science (IC^2S^2)
    Zürich, Switzerland (online)   2021/07

22. Networks 2021: A Joint Sunbelt and NetSci Conference
    Washington, DC (online)   2021/07

23. Seminar, Stanford METRICS International Forum
    Meta-research Innovation Center, Standford University (online)   2021/04

24. Invited talk, Webinar, Saving Curies Series   2021/03

25. Invited talk, Webinar, Swarma Club   2021/01

26. Spotlight speaker, Rising Stars in Data Science Workshop, Data Science Institute
    University of Chicago (online)   2021/01

27. The 7th Satellite on Quantifying Success, NetSci 2020   2020/09

28. Invited talk, Webinar ML Collective   2020/09

29. International Conference on Computational Social Science (IC^{2}S^2) Boston, MA (online)   2020/07

30. Seminar, Northwestern Institute on Complex Systems   2020/06

31. Invited talk, Webinar, Aggregate Intellect (ai.science)   2020/02

32. Invited talk, Northwestern Data Science Night   2020/02

33. Invited talk, Michigan Institute for Data Science Symposium
University of Michigan, Ann Arbor, MI   2019/11

34. Seminar, Northwestern Institute on Complex Systems   2019/10

35. Invited talk, Institute for Research on Innovation & Science Summit
University of Michigan, Ann Arbor, MI   2019/09

36. Invited talk, Great Lakes Data Science Workshop
University of Notre Dame, Notre Dame, IN   2019/09

37. International Conference on Computational Social Science (IC^{2}S^2)
Amsterdam, Netherlands   2019/07

38. NetSci 2019: International Workshop and Conference on Network Science
Burlington, VT   2019/05

39. Invited talk, Seminar, Center for Neuroscience, Zhejiang University
Hangzhou, Zhejiang, China   2018/12

40. International Conference on Computational Social Science (IC^{2}S^2)
Evanston, IL   2018/07

41. Summer Institute in Computational Social Science (SICSS)
Chicago, IL   2018/06

42. Seminar, Northwestern IEMS-OM Collaborative Workshop   2018/04

43. Speaker, Northwestern Computational Research Day   2018/04

44. Seminar, Northwestern SIAM Bridging the Gap   2017/11

45. Speaker, Northwestern Current Research & Future Careers Symposium   2017/08

46. Invited speaker, AI & Public Policy Symposium
Tsinghua University, Beijing, China   2017/07

47. Invited participant, Kaifeng Institute on Geometry and Statistical Learning
Swarma Club, Beijing, China   2017/07

48. Symposium for the Society of Young Network Scientists, NetSci 2017
Indianapolis, IN   2017/06

49. NetSci 2017: International Workshop and Conference on Network Science
Indianapolis, IN   2017/06

50. Seminar, Northwestern Institute on Complex Systems   2017/05

51. Seminar, Kellogg MORS Macro Brown Bag   2017/05

52. Speaker, Kellogg-Booth Student Symposium, Chicago, IL   2017/04

53. Speaker, Chicago Area SIAM Student Conference, Chicago, IL   2017/04

ACADEMIC SERVICE	**Organizer**	
	• Summer Institute in Computational Social Science (SICSS), Chicago site	2021

Program Committee
• International ACM Conference on Web Science (WebSci)	2022
• International World Wide Web Conference (TheWebConf)	2021-2022
• International AAAI Conference on Web and Social Media (ICWSM)	2021-2022
Best Program Committee Member Award (2021)	

Referee
• Scientific Reports	2017
• PLOS One	2017-2021
• Europhysics Letters	2018-2019
Distinguished Reviewer Award (2018)	
• Physica A: Statistical Mechanics and its Applications	2018
• Journal of Informetrics	2017-2019
Outstanding Reviewer Award (2018)	
• Scientometrics	2021
• Journal of the Association for Information Science and Technology	2021
• Science and Engineering Ethics	2022
• EPJ Data Science	2021-2022
• PeerJ Computer Science	2019-2020
• Social Network Analysis and Mining	2019-2020
• AI & Society: Knowledge, Culture and Communication	2020
• IEEE Transactions on Network Science and Engineering	2018
• IEEE Transactions on Big Data	2020
• ACM Web Science Conference	2020
• International Conference on Computational Social Science	2020
• Annual Meeting of the Academy of Management	2020-2021
Best Reviewer Award, Technology and Innovation Management (2021)	

IN THE PRESS	**List of selected media coverage**

Adaptability and the pivot penalty in science and technology

- *New things under the sun*: Building a new research field

Potentially long-lasting effects of the pandemic on scientists

- *Forbes*: The bad news, good news, bad news about COVID's impact on scientific research
- *Science*: The pandemic's slowing of research productivity may last years
- *Nature*: The COVID pandemic has harmed researcher productivity – and mental health
- *Scientific American*: A high-speed scientific hive mind emerged from the COVID pandemic
- *Physics World*: New non-COVID research projects plunge by a third since the start of the pandemic
- *GenomeWeb*: Pandemic, productivity, and optimism
- Other coverages include ScienMag, Lab Manager, Medical News, and Scitech Daily.

Coevolution of policy and science during the pandemic

- *The Scientist*: WHO leads in using solid science to draft COVID-19 policy
- *EurekAlert*: Policymakers draw heavily from highly cited COVID-19 science
- *Kellogg Insight*: How well does COVID public policy align with science?
- Other coverages include Science Policy News, ScienMag, Lab Manager, Tyee and FROMTBOT.

Unequal effects of the COVID-19 pandemic on scientists

- *Forbes*: COVID's surprising toll on careers of women scientists
- *Forbes*: COVID-19's effects on women in science intensify disparities
- *The Atlantic*: How science beat the virus
- *Times Higher Ed*: Pandemic lockdown holding back female academics, data show
- *Times Higher Ed*: Childcare the key limit on scientists' pandemic working hours
- *Inside Higher Ed*: University research: a time of disparate change
- *Inside Higher Ed*: Keeping COVID-19 from sidelining equity
- *Inside Higher Ed*: Implementing pandemic equity measures for faculty
- *Scientific American*: Women in science may suffer lasting career damage from COVID-19
- *Scientific American*: COVID has laid bare the inequities that face mothers in STEM
- *Science*: Pandemic hits scientist parents hard
- *The Scientist*: Pandemic pressures may drive young scientists away from autism research
- *AAAS*: Institutions must support minority researchers impacted by COVID-19
- *Wire*: COVID-19 changed scientists' research methods, will this change science itself?
- *EurekAlert*: Pandemic disproportionately affects scientists with young children
- *Kellogg Insight*: The pandemic has slashed scientists' productivity
- Other coverages include Medium, Spectrum News, Science Policy News, ThePaper.cn, Deccan Herald, Lab Manager, ScienMag, Oxford Student, Phys.org, Psychology Today, ASBMB Today, Marketplace, Chemistry Views and Chemistry World.

Scientific elite revisited: Patterns of productivity, collaboration, authorship and impact

- *Daily Mail*: The Nobel curse is REAL
- *The Times*: Scientists fall foul of Nobel curse
- Other coverages include Phys.org and Chemistry World.

Quantifying the dynamics of failure across science, startups and security

- *Inc.*: 5 ways to avoid startup failure by increasing your team's learning speed
- *Fast Company*: Science reveals the tipping point between success and failure
- *Global Advisors*: Why failing fast is critical if you want to eventually win
- *Washington Post*: The lasting lesson of this Super Bowl: failure is necessary
- *Forbes*: Don't fail fast – fail smart
- *MIT Technology Review*: How the data mining of failure could teach us the secrets of success
- *Harvard Business Review*: The tipping point between failure and success
- *Scientific American*: Failure found to be an "essential prerequisite" for success?
- *Medium*: Ignite success sooner: 2 ways to fail better
- *Science Daily*: Failure prognosis: Data science predicts which failures will ultimately succeed
- *Business Insider*: Researchers found a key reason certain people succeed while others fall behind, and it starts with learning from past mistakes
- *Communications of ACM*: How the data mining of failure could teach us the secrets of success
- *Lancet*: Offline: It's time to prepare your anti-CV
- *Kellogg Insight*: Why do some people succeed after failing while others continue to flounder?
- Other coverages include Science Policy News, Lab Manager, YCombinator Hacker News, China.org, Xinhua, News Ghana, Slate France, internetactu, ZAP, Sohu News and Phys.org.

Nobel laureates are almost the same as us

- *Physics Today*: The Nobel Prize in physics: The papers
- *Kellogg Insight*: Nobel Prize winners – They're just like us!
- *Inside Science*: Getting ready for the 2019 Nobel Prizes