

# Yian Yin

CONTACT INFORMATION	<b>Northwestern University</b>	<i>Email:</i> <a href="mailto:yianyin@u.northwestern.edu">yianyin@u.northwestern.edu</a>
	Center for Science of Science and Innovation Northwestern Institute on Complex Systems 600 Foster Street, Evanston, IL 60208	<i>Website:</i> <a href="https://www.yianyin.net">https://www.yianyin.net</a> <i>Voice:</i> 425-209-5518 Updated May 2022
ACADEMIC POSITIONS	<b>Cornell University, Ithaca, NY, USA</b>	
	Assistant Professor, Information Science, Bowers College of Computing & Information Science	Jul 2023 –
	<b>Northwestern University, Evanston, IL, USA</b>	
	Research Assistant Professor, Management & Organizations, Kellogg School of Management	Jul 2022 – Jun 2023
	Research Fellow, Center for Science of Science & Innovation	Sep 2019 –
	Researcher in Residence, Northwestern Institute on Complex Systems	Aug 2016 –
	<b>Microsoft Research, Redmond, WA, USA</b>	
	Visiting Researcher, Microsoft Academic Graph Analytics	Oct 2018 – Nov 2018
	<b>Pennsylvania State University, University Park, PA, USA</b>	
	Visiting Scholar, College of Information Sciences & Technology	Jul 2015 – Oct 2015
EDUCATION	<b>Peking University, Beijing, China</b>	
	Undergraduate Research Assistant, Center for Information Sciences	May 2014 – Jun 2016
	<b>Northwestern University, Evanston, IL, USA</b>	
	<b>Ph.D.</b> , Industrial Engineering & Management Sciences McCormick School of Engineering & Applied Sciences	Expected 2022
	<b>Committee:</b> <a href="#">Noshir Contractor</a> <sup>chair</sup> , <a href="#">Dashun Wang</a> <sup>co-chair</sup> , <a href="#">Jorge Nocedal</a>	
	<b>M.Sc.</b> , Industrial Engineering & Management Sciences	Dec 2017
	<b>Peking University, Beijing, China</b>	
	<b>B.Sc.</b> , Statistics School of Mathematical Sciences	Jun 2016
	<b>B.Ec.</b> , Economics National School of Development	Jun 2016
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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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*, in principle accepted by *Nature Human Behaviour*
  - [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 to *Proceedings of the National Academy of Sciences*
  - [11] Zihang Lin‡, **Yian Yin**, Lu Liu & Dashun Wang (2022)  
SciSciNet: A large-scale open datalake for the science of science  
In submission to *Scientific Data*
- 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



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, Management & 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 <sup>2</sup> S <sup>2</sup> ) 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, Stanford University (online)	2021/04
24. Invited talk, Webinar, Saving Curies Series	2021/03
25. Invited talk, Webinar, Swarna Club	2021/01
26. Spotlight speaker, Rising Stars in Data Science Workshop, Data Science Institute University of Chicago (online)	2021/01
27. The 7 <sup>th</sup> Satellite on Quantifying Success, NetSci 2020	2020/09

28. Invited talk, Webinar ML Collective	2020/09
29. International Conference on Computational Social Science (IC <sup>2</sup> S <sup>2</sup> ) 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 <sup>2</sup> S <sup>2</sup> ) 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 <sup>2</sup> S <sup>2</sup> ) 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