

Hao Peng

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RESEARCH INTERESTS	Computational Social Science, Data Science, Innovation Management, Science and Technology, Online Media, Social Networks, Complex Systems, Leadership, Teams, Diversity, Gender, Ethnicity, Natural Language Processing, AI	
EMPLOYMENT	Postdoctoral Fellow Northwestern University <ul style="list-style-type: none">• Kellogg School of Management• Northwestern Institute on Complex Systems (NICO)• Advisor: Brian Uzzi	May 2022 - Present Evanston, IL, USA
	Research Intern University of Southern California <ul style="list-style-type: none">• Information Sciences Institute (ISI)• Host: Emilio Ferrara	May 2017/19 - July 2017/19 Los Angeles, USA
	Research Intern University of Pennsylvania <ul style="list-style-type: none">• The Positive Psychology Center• World Well-Being Project (WWBP)• Host: Lyle Ungar, M. Abdul-Mageed	May 2016 - Aug. 2016 Philadelphia, USA
EDUCATION	Ph.D. in Information Science University of Michigan , School of Information <ul style="list-style-type: none">• Advisor: Daniel Romero• Thesis: Gender and Ethnic Disparities in Science Production and Dissemination	Sep. 2017 - May 2022 Ann Arbor, MI, USA
	M.S. in Data Science Indiana University , School of Informatics <ul style="list-style-type: none">• Advisor: Yong-Yeol Ahn, Filippo Menczer	Sep. 2015 - May 2017 Bloomington, IN, USA
	B.S. in Information Management Sun Yat-Sen University , School of Information Management	Sep. 2011 - June 2015 Guangzhou, China
	Summer Visiting Scholar National Chengchi University , School of Business	Jun 2012 - Aug 2012 Taipei City

PUBLICATIONS

* denotes equal contribution.

Under Review / Pre-prints

1. Promotional Language and the Adoption of Innovative Ideas in Science
H. Peng*, H.S. Qiu*, H.B. Fosse, B. Uzzi
(R&R at PNAS)
2. The Gender Gap in Scholarly Self-Promotion on Social Media
H. Peng, M. Teplitskiy, D.M. Romero, E.Á. Horvát
(In Review) [[Link](#)]
3. Acceptance in Top Biology Journals Shows Large Ethnic Disparities
H. Peng, K.R. Lakhani, M. Teplitskiy
SocArXiv, (2021) [[Link](#)]

Journal Papers

4. Author Mentions in Science News Reveal Widespread Disparities Across Name-inferred Ethnicities
H. Peng, M. Teplitskiy, D. Jurgens
Quantitative Science Studies 1-23 (2024)
5. Is Novel Research Worth Doing? Evidence From Peer Review at 49 Journals
M. Teplitskiy, **H. Peng**, A. Blasco, K.R. Lakhani
Proceedings of the National Academy of Sciences 119, e2118046119 (2022)
6. Dynamics of Cross-Platform Attention to Retracted Papers
H. Peng, D.M. Romero, E.Á. Horvát
Proceedings of the National Academy of Sciences 119, e2119086119 (2022)
7. Neural Embeddings of Scholarly Periodicals Reveal Complex Disciplinary Organizations
H. Peng, Q. Ke, C. Budak, D.M. Romero, Y.Y. Ahn
Science Advances 7, eabb9004 (2021)
8. Network Modularity Controls the Speed of Information Diffusion
H. Peng, A. Nematzadeh, D.M. Romero, E. Ferrara
Physical Review E 112, 052316 (2020)
9. Social Influence and Unfollowing Accelerate the Emergence of Echo Chambers
K. Sasahara, W. Chen, **H. Peng**, G.L. Ciampaglia, A. Flammini, F. Menczer
Journal of Computational Social Science (2020)

Conference Papers

10. Event-Driven Analysis of Crowd Dynamics in the *BLM* Online Social Movement
H. Peng, C. Budak, D.M. Romero
The ACM International World Wide Web Conference (2019)

11. Recognizing Pathogenic Empathy in Social Media
M. Abdul-Mageed, A. Buffone, **H. Peng**, S. Giorgi, J. Eichstaedt, L. Ungar
The International AAAI Conference on Web and Social Media (2017)
12. Performance Dynamics and Success in Online Games
A. Sapienza, **H. Peng**, E. Ferrara
IEEE International Conference on Data Mining Workshop (2017)

TEACHING

Northwestern University, School of Communication

- MSLCE - Culture & Art Analytics (lecturer for Ágnes Horvát) Spring 2023

University of Michigan, School of Information

- SI 106 - Programs, Information and People (TA for Paul Resnick) Winter 2019
- SI 330 - Data Manipulation (TA for Matthew Kay) Fall 2018

AWARDS AND FELLOWSHIPS

Awards

- Best Paper Award (\$1,000), *ASIS&T*, SIGMET, 2021
- Second Prize (\$750), John Hunter Excellence in Plotting Contest, *SciPy*, 2019
- Microsoft Azure Research Award, 2016

Fellowships

- UMich Rackham Travel Award, 2019
- UMSI PhD Travel Grant, 2018, 2019
- Travel Scholarship, *IC2S2*, 2018
- Indiana University Data Science Program Fellowship, 2015
- Academic Excellence Scholarship of Sun Yat-Sen University, 2011

Other Awards

- First Prize in the Provincial Physics Competition, Hubei, China, 2010
- Third Prize in the National Physics Olympiad Contest, China, 2010

MEDIA COVERAGE

Selected News Reports

1. Dec 2022, *Michigan News*
- Journal editors, reviewers don't show bias against novelty
2. July 2022, *The Washington Post*
- Retractions aren't a panacea for bad research
3. July 2022, *Le Monde* (French)
- En science aussi les fausses informations circulent mieux que les bonnes
- (In science too, false information circulates better than good information)
4. July 2022, *Deutschlandfunk* (German Radio)
- Warum fehlerhafte Studien oft die meiste Aufmerksamkeit bekommen
- (Why flawed studies often get the most attention)
5. June 2022, *Northwestern Now*
- Flawed research not retracted fast enough to prevent spread of misinformation

6. June 2022, *Retraction Watch, Inside Higher Ed*
- Retractions: A Missed Opportunity?
7. June 2022, *Academica Group*
- Article retractions take too long to influence public discourse
8. June 2022, *Michigan News, Phys.org*
- Flawed research not retracted fast enough to prevent spread of misinformation, study finds
9. Oct 2021, *Entrepreneur, Scientific American, The Conversation, Yahoo! News*
- Facebook Whistleblower Testified That Company's Algorithms Are Dangerous
10. Oct 2021, *Big Think*
- Here's exactly how social media algorithms can manipulate you
11. Sep 2021, *MSN, Salon, Tech Xplore*
- How "engagement" makes you vulnerable to manipulation and misinformation on social media
12. Sep 2021, *The Conversation, Newsbreak, Yahoo!, Phys.org, Arizona Daily Star*
- Facebook's algorithms fueled massive foreign propaganda campaigns during the 2020 election
13. Dec 2020, *Scientific American*
- Information Overload Helps Fake News Spread, and Social Media Knows It
14. Sep 2020, *New Scientist*
- US science news biased against people with names of non-British origin

SELECTED TALKS

Invited Presentations

1. *School of Data Science* (Zoom), City University of Hong Kong Mar 2024
- Necessity and Strategy for Facilitating Idea Adoption in Science
2. *Wednesdays@NICO*, Northwestern University Jan 2024
- Necessity and Strategy for Facilitating Idea Adoption in Science
3. *Graduate School of Management* (Zoom), UC Davis Jan 2024
- Necessity and Strategy for Facilitating Idea Adoption in Science
4. *HKU Business School* (Zoom), The University of Hong Kong Dec 2023
- Necessity and Strategy for Facilitating Idea Adoption in Science
5. *Harvard Business School* (Zoom), Harvard University Oct 2023
- Does Promotional Language Communicate the Merits of Innovative Science?
6. *Mendoza College of Business* (Zoom), University of Notre Dame Oct 2023
- Does Promotional Language Communicate the Merits of Innovative Science?

Conference Presentations

1. *IC2S2*, UChicago July 2022
- Gender Differences in Scholarly Self-Promotion on Twitter
2. *ICSSI*, National Academy of Sciences, Washington, DC June 2022
- Dynamics of Cross-Platform Attention to Retracted Papers
- The Gender Gap in Scholarly Self-Promotion on Twitter

3. IC2S2, ETH Zurich, Switzerland July 2021
- Analyzing Online Attention to Retracted Papers
4. IC2S2, MIT July 2020
- Network Modularity Controls the Speed of Information Diffusion
- Neural Embeddings of Periodicals Reveal Complex Disciplinary Organizations
- Say My Name: Author Mentions in Science News Reveal Ethnic Bias
5. WWW, San Francisco May 2019
- Event-Driven Analysis of Crowd Dynamics in BLM Online Social Movement
6. IC2S2, Northwestern University July 2018
- Event-Driven Modeling of Crowd Dynamics in Online Social Movements
7. NetSci, Indianapolis June 2017
- A Quantitative Model for Revealing Disciplinary Organizations in Science

SERVICE

Journal Reviewer

- *Science Advances, Nature Human Behaviour, PLOS One*
- *Science Communication, Scientometrics, Sage Open*
- *Transactions on the Web*

Program Committee Member, Reviewer

- *The ACM Web Conference*: 2019, 2020
- *The ACM International Conference on Web Search and Data Mining*: 2019, 2020
- *The ACM Conference on Human Factors in Computing Systems*: 2022, 2024
- *The ACM Conference on Computer-Supported Cooperative Work*: 2020, 2023
- *The International AAAI Conference on Web and Social Media*: 2020-2024
- *International Conference on Computational Social Science*: 2022-2024
- *Academy of Management Conference*: 2024
- *Conference on Complex Systems*: 2024

Professional Memberships

- *Academy of Management (AOM)*
- *The Network Science Society (NetSci)*
- *The Complex Systems Society (CSS)*
- *International Communication Association (ICA)*
- *Association for Computational Linguistics (ACL)*
- *Association for Information Science & Technology (ASIS&T)*

REFERENCES

- Brian Uzzi
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Northwestern University, Kellogg School of Management
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- Daniel M. Romero
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