

# Hao Peng

---

CONTACT	Chambers Hall 600 Foster Street Evanston, IL 60208	Website: <a href="https://haoopeng.github.io/">https://haoopeng.github.io/</a> Email: <a href="mailto:hao.peng@kellogg.northwestern.edu">hao.peng@kellogg.northwestern.edu</a> Twitter: @haoopeng
RESEARCH INTERESTS	Computational Social Science, Innovation Management, Social Networks, Communication, Leadership, DEI, Gender, Ethnicity, Natural Language Processing, AI	
EMPLOYMENT	Postdoctoral Fellow <b>Northwestern University</b> <ul style="list-style-type: none"><li>Kellogg School of Management</li><li>Northwestern Institute on Complex Systems (NICO)</li><li>Advisor: Brian Uzzi</li></ul>	May 2022 - Present Evanston, IL, USA
	Research Intern <b>University of Southern California</b> <ul style="list-style-type: none"><li>Information Sciences Institute (ISI)</li><li>Host: Emilio Ferrara</li></ul>	May 2017/19 - July 2017/19 Los Angeles, USA
	Research Intern <b>University of Pennsylvania</b> <ul style="list-style-type: none"><li>The Positive Psychology Center</li><li>World Well-Being Project (WWBP)</li><li>Host: Lyle Ungar, M. Abdul-Mageed</li></ul>	May 2016 - Aug. 2016 Philadelphia, USA
EDUCATION	Ph.D. in Information Science <b>University of Michigan</b> , School of Information <ul style="list-style-type: none"><li>Advisor: Daniel Romero</li><li>Dissertation: Gender and Ethnic Disparities in Science Production and Dissemination</li></ul>	Sep. 2017 - May 2022 Ann Arbor, MI, USA
	M.S. in Data Science <b>Indiana University</b> , School of Informatics <ul style="list-style-type: none"><li>Advisor: Yong-Yeol Ahn, Filippo Menczer</li></ul>	Sep. 2015 - May 2017 Bloomington, IN, USA
	B.S. in Information Management <b>Sun Yat-Sen University</b> , School of Information Management	Sep. 2011 - June 2015 Guangzhou, China
	Summer Visiting Scholar <b>National Chengchi University</b> , School of Business	Jun 2012 - Aug 2012 Taipei City
PUBLICATIONS	* denotes equal contribution.	
	<b>Under Review</b>	
	1. Promotional Language and the Adoption of Innovative Ideas in Science <b>H. Peng*</b> , H.S. Qiu*, H.B. Fosse, B. Uzzi (In Review)	

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. Author Mentions in Science News Reveal Widespread Disparities Across Name-inferred Ethnicities  
**H. Peng**, M. Teplitskiy, D. Jurgens  
(In Review) [[Link](#)]
4. Acceptance in Top Journals Shows Large Ethnic Disparities  
**H. Peng**, K.R. Lakhani, M. Teplitskiy  
*SocArXiv*, (2021) [[Link](#)]

### Journal Papers

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 (Guest lecture for Ágnes Horvát)

Spring 2023

#### University of Michigan, School of Information

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

Winter 2019  
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, Mirage News*
  - 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

### 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  
- 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 Wide-Spread Ethnic Bias
5. *WWW*, San Francisco May 2019  
- Event-Driven Analysis of Crowd Dynamics in the 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 Framework for Revealing Disciplinary Organizations of Science

## SERVICE

### Journal Reviewer

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

### Program Committee Member, Reviewer

- *WWW*: 2019, 2020
- *WSDM*: 2019, 2020
- *ICWSM*: 2020, 2021, 2022, 2023, 2024
- *CHI*: 2022, 2024
- *CSCW*: 2020, 2023
- *IC2S2*: 2022, 2023

## REFERENCES

- Brian Uzzi  
Richard L. Thomas Distinguished Professor of Leadership  
Northwestern University, Kellogg School of Management  
uzzi@kellogg.northwestern.edu
- Daniel M. Romero  
Associate Professor, Information & Computer Science and Complex Systems  
University of Michigan  
drom@umich.edu
- Emőke-Ágnes Horvát  
Associate Professor, Communication and Computer Science  
Northwestern University  
a-horvat@northwestern.edu

- Yong-Yeol Ahn  
Professor, School of Informatics, Computing, and Engineering  
Indiana University Bloomington  
yyahn@iu.edu