

# Hao Peng

---

<b>CONTACT</b>	16/224, Lau Ming Wai Academic Building City University of Hong Kong Kowloon Tong, Hong Kong	Website: <a href="https://haoopeng.github.io/">https://haoopeng.github.io/</a> Email: <a href="mailto:haopeng@cityu.edu.hk">haopeng@cityu.edu.hk</a> LinkedIn: <a href="#">@hao-peng</a>
----------------	---	--

<b>RESEARCH INTERESTS</b>	Computational Social Science, Data Science, Science of Innovation, Social Networks, Management Science, Complex Systems, Network Science, Social Media, Natural Language Processing, Diversity, Leadership, Communication, Ethnicity, Gender
---------------------------	--

<b>EMPLOYMENT</b>	Assistant Professor <b>City University of Hong Kong</b> <ul style="list-style-type: none"><li>Department of Data Science</li><li>College of Computing</li></ul>	<i>July 2024 - Present</i> <i>Hong Kong, SAR</i>
	Postdoctoral Fellow <b>Northwestern University</b> <ul style="list-style-type: none"><li>Kellogg School of Management (KSM)</li><li>Northwestern Institute on Complex Systems (NICO)</li></ul>	<i>May 2022 - June 2024</i> <i>Evanston, IL, USA</i>
	Research Intern <b>University of Southern California</b> <ul style="list-style-type: none"><li>Information Sciences Institute (ISI)</li></ul>	<i>May 2019 - July 2019</i> <i>Los Angeles, USA</i>
	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></ul>	<i>May 2016 - Aug. 2016</i> <i>Philadelphia, USA</i>

<b>EDUCATION</b>	Ph.D. in Information Science <b>University of Michigan</b> , School of Information	<i>Sep. 2017 - May 2022</i> <i>Ann Arbor, MI, USA</i>
	M.S. in Data Science <b>Indiana University</b> , School of Informatics	<i>Sep. 2015 - May 2017</i> <i>Bloomington, IN, USA</i>
	B.S. in Information Management <b>Sun Yat-Sen University</b> , School of Information Management	<i>Sep. 2011 - June 2015</i> <i>Guangzhou, China</i>

<b>AWARDS / GRANTS</b>	<b>Grants</b> <ul style="list-style-type: none"><li>City University of Hong Kong Startup Grant, HKD 900,000 (2024-2026)</li></ul>
	<b>Awards</b> <ul style="list-style-type: none"><li>Emerging Researcher Award, <i>The Complex Systems Society</i>, London, 2024</li><li>Best Paper Honorable Mention, <i>NetSci</i>, Québec City, 2024</li></ul>

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

#### Other Awards

- OPA Conference Travel Grant, Northwestern University, 2024
- 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
- First Prize in the Provincial Physics Competition, Hubei, China, 2010
- Third Prize in the National Physics Olympiad Contest, China, 2010

#### PUBLICATIONS

\* denotes equal contribution. † denotes corresponding author.

#### Journal Papers

1. Use of Promotional Language in Grant Applications and Grant Success  
H.S. Qiu, **H. Peng**, H.B. Fosse, T.K. Woodruff, B. Uzzi  
*JAMA Network Open* 7(12), e2448696 (2024)
2. Promotional Language and the Adoption of Innovative Ideas in Science  
**H. Peng\***, H.S. Qiu\*, H.B. Fosse, B. Uzzi  
*Proceedings of the National Academy of Sciences* 121, e2320066121 (2024)
3. Author Mentions in Science News Reveal Widespread Disparities Across Name-inferred Ethnicities  
**H. Peng†**, M. Teplitskiy, D. Jurgens  
*Quantitative Science Studies* 1-23 (2024)
4. 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)
5. 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)
6. 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)
7. Network Modularity Controls the Speed of Information Diffusion  
**H. Peng**, A. Nematzadeh, D.M. Romero, E. Ferrara  
*Physical Review E* 112, 052316 (2020)
8. 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)

9. Sentiment Analysis of Web Reviews Using Comparative Sentence Extraction  
**H. Peng**, J. Xu, Z. Xiao  
*Data Analysis and Knowledge Discovery* 265 (2015)

### 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)

### Pre-prints

13. Acceptance in Top Biology Journals Shows Large Ethnic Disparities  
**H. Peng**, K.R. Lakhani, M. Teplitskiy  
*SocArXiv* (2021) [[Link](#)]

### TEACHING

**City University of Hong Kong**, Department of Data Science

- SDSC 5002 - Exploratory Data Analysis and Visualization Sem A 2024/25

**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

### SELECTED TALKS

#### Invited Talks

(Talks in 2023/24 were scheduled virtually due to family circumstances)

1. *Computational Social Science Lab*, Chinese University of Hong Kong Jan 2025
2. Southern University of Science and Technology, Shenzhen Jan 2025
3. *School of Information Management*, Sun Yat-Sen University Nov 2024  
- Promotional Language and the Adoption of Innovative Ideas in Science
4. *School of Data Science* (Zoom), City University of Hong Kong Mar 2024  
- Necessity and Strategy for Facilitating Idea Adoption in Science
5. *Wednesdays@NICO*, Northwestern University Jan 2024  
- Necessity and Strategy for Facilitating Idea Adoption in Science
6. *Graduate School of Management* (Zoom), UC Davis Jan 2024  
- Necessity and Strategy for Facilitating Idea Adoption in Science

7. *HKU Business School* (Zoom), The University of Hong Kong Dec 2023  
- Necessity and Strategy for Facilitating Idea Adoption in Science
8. *Harvard Business School* (Zoom), Harvard University Oct 2023  
- Does Promotional Language Communicate the Merits of Innovative Science?
9. *Mendoza College of Business* (Zoom), University of Notre Dame Oct 2023  
- Does Promotional Language Communicate the Merits of Innovative Science?

#### Conference Presentations

1. National Bureau of Economic Research (*NBER*), Boston July 2024  
- Promotional Language and the Adoption of Innovative Ideas in Science
2. *IC2S2*, UChicago July 2022  
- Gender Differences in Scholarly Self-Promotion on Twitter
3. *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
4. *IC2S2*, ETH Zurich, Switzerland July 2021  
- Analyzing Online Attention to Retracted Papers
5. *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
6. *WWW*, San Francisco May 2019  
- Event-Driven Analysis of Crowd Dynamics in BLM Online Social Movement
7. *IC2S2*, Northwestern University July 2018  
- Event-Driven Modeling of Crowd Dynamics in Online Social Movements
8. *NetSci*, Indianapolis June 2017  
- A Quantitative Model for Revealing Disciplinary Organizations in Science

#### Seminar Talks

- Science of Science for the Future, Swarna Pattern Oct 2024
- Job Market Brain Dump, Kellogg, Northwestern University May 2024
- DS/CSS Seminar, University of Michigan Oct. 2019
- IAR Seminar, University of Michigan April 2019

#### SERVICES

##### City University of Hong Kong, Department of Data Science

- PhD Admission Committee Member, 2024-2026
- MSDS Program Committee Member, 2024-2026

##### Journal Reviewer

- *PNAS*, *Science Advances*, *Nature Human Behaviour*, *Nature Communications*, *Scientific Reports*
- *Transactions on the Web*, *Science Communication*, *PLOS One*, *Scientometrics*, *Journal of the Association for Information Science and Technology*, *Sage Open*

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

### **MEDIA COVERAGE Selected News Stories**

1. Aug 2024, Science News
  - The power of words: how promotional language drives scientific innovation
2. April 2024, NPR
  - Which scientists get mentioned in the news? Mostly ones with Anglo names, says study
3. April 2024, LSE Impact Blog
  - Researchers with minority ethnic names are written out of US science journalism
4. April 2024, Fast Company
  - Researchers with African and East Asian names are less likely to be mentioned in U.S. media
5. April 2024, The Conversation, Yahoo! News, Phys.org
  - US media coverage of new science less likely to mention researchers with African and East Asian names
6. Mar 2024, Science Magazine
  - Scientists with East Asian and African names get short shrift in news coverage
7. Dec 2022, Michigan News
  - Journal editors, reviewers don't show bias against novelty
8. July 2022, The Washington Post
  - Retractions aren't a panacea for bad research
9. 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)
10. July 2022, Deutschlandfunk (German National Radio)
  - Warum fehlerhafte Studien oft die meiste Aufmerksamkeit bekommen
  - (Why flawed studies often get the most attention)

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