Hao Peng

16/224, Lau Ming Wai Academic Building Website: https://haoopeng.github.io/ **CONTACT** City University of Hong Kong Email: haopeng@cityu.edu.hk Kowloon Tong, Hong Kong LinkedIn: @hao-peng RESEARCH Computational Social Science, Data Science, Science of Innovation, Social Networks, Network Science, Management Science, Complex Systems, Online Media, Diversity, **INTERESTS** Leadership, Communication, Ethnicity, Gender, NLP, AI **EMPLOYMENT Assistant Professor** July 2024 - Present City University of Hong Kong Hong Kong, SAR • Department of Data Science College of Computing Postdoctoral Fellow May 2022 - June 2024 Northwestern University Evanston, IL, USA • Advisor: Brian Uzzi Kellogg School of Management (KSM) • Northwestern Institute on Complex Systems (NICO) Research Intern May 2019 - July 2019 University of Southern California Los Angeles, USA • Host: Emilio Ferrara • Information Sciences Institute (ISI) Research Intern May 2016 - Aug. 2016 University of Pennsylvania Philadelphia, USA • Host: Lyle Ungar, M. A. Mageed • The Positive Psychology Center • World Well-Being Project (WWBP) **EDUCATION** Ph.D. in Information Science Sep. 2017 - May 2022 **University of Michigan,** School of Information Ann Arbor, MI, USA • Advisor: Daniel Romero • Thesis: Gender and Ethnic Disparities in Science Production and Dissemination M.S. in Data Science Sep. 2015 - May 2017 Indiana University, School of Informatics Bloomington, IN, USA Advisor: Yong-Yeol Ahn, Filippo Menczer

Sun Yat-Sen University, School of Information Management

Sep. 2011 - June 2015

Guangzhou, China

B.S. in Information Management

AWARDS/GRANTS Awards

- Emerging Researcher Award, The Complex Systems Society, London, 2024
- Best Paper Honorable Mention, NetSci, Québec City, 2024
- 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

- Travel Award, National Bureau of Economic Research (NBER), 2024
- 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.

Journal Papers

- 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)
- 2. Author Mentions in Science News Reveal Widespread Disparities Across Name-inferred Ethnicities
 - **H. Peng,** M. Teplitskiy, D. Jurgens *Quantitative Science Studies* 1-23 (2024)
- 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)
- 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)
- 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)
- 6. Network Modularity Controls the Speed of Information Diffusion **H. Peng**, A. Nematzadeh, D.M. Romero, E. Ferrara *Physical Review E* 112, 052316 (2020)
- 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

- 8. 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)
- 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)
- Performance Dynamics and Success in Online Games
 A. Sapienza, H. Peng, E. Ferrara
 IEEE International Conference on Data Mining Workshop (2017)

Pre-prints

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

- School of Data Science (Zoom), City University of Hong Kong

 Necessity and Strategy for Facilitating Idea Adoption in Science

 Wednesdays@NICO, Northwestern University
 Jan 2024
- 2. Wednesdays@NICO, Northwestern University- 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
 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. National Bureau of Economic Research, 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

- Dynamics of Cross-Platform Attention to Retracted Papers

- The Gender Gap in Scholarly Self-Promotion on Twitter

4. IC2S2, ETH Zurich, Switzerland

July 2021

June 2022

- 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

Job Market Brain Dump, Kellogg, Northwestern University
 DS/CSS Seminar, University of Michigan
 IAR Seminar, University of Michigan
 April 2019

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

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