Hao Peng

Chambers Hall https://haoopeng.github.io/ CONTACT Website:

600 Foster Street Email: hao.peng@kellogg.northwestern.edu

Evanston, IL 60208 Twitter: (a)haoopeng

Computational Social Science, Innovation Management, Social Networks, Communication, RESEARCH

INTERESTS Diversity, Leadership, Ethnicity, Gender

EMPLOYMENT Postdoctoral Fellow May 2022 - Present Evanston, IL, USA

Northwestern University

• Kellogg School of Management

 Northwestern Institute on Complex Systems (NICO) • Advisor: Brian Uzzi

Research Intern May 2017/19 - July 2017/19

Los Angeles, USA

University of Southern California • Information Sciences Institute (ISI)

• Host: Emilio Ferrara

Research Intern May 2016 - Aug. 2016 Philadelphia, USA

University of Pennsylvania

• The Positive Psychology Center • World Well-Being Project (WWBP)

• Host: Lyle Ungar, M. Abdul-Mageed

EDUCATION Ph.D. in Information Science Sep. 2017 - May 2022

University of Michigan, School of Information Ann Arbor, MI, USA

• Advisor: Daniel Romero

• Dissertation: 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

B.S. in Information Management Sep. 2011 - June 2015 Sun Yat-Sen University, School of Information Management Guangzhou, China

Summer Visiting Scholar Jun 2012 - Aug 2012 National Chengchi University, School of Business Taipei City

PUBLICATIONS * denotes equal contribution.

Under Review

1. Does Promotional Language Communicate the Merits of Innovative Science? H. Peng*, H.S. Qiu*, H.B. Fosse, B. Uzzi (In Review)

- The Gender Gap in Scholarly Self-Promotion on Social Media H. Peng, M. Teplitskiy, D.M. Romero, E.Á. Horvát (In Review) [Link]
- Author Mentions in Science News Reveal Widespread Disparities Across Name-inferred Ethnicities
 - **H. Peng**, M. Teplitskiy, D. Jurgens (In Review) [Link]
- Acceptance in Top Journals Shows Large Ethnic Disparities
 H. Peng, K.R. Lakhani, M. Teplitskiy
 SocArXiv, (2021) [Link]

Journal Papers

- 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)
- 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, eabbgoo4 (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

- 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)
 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, 2020WSDM: 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