Hao Peng

Chambers Hall https://haoopeng.github.io/ Website: **CONTACT** 600 Foster Street Email: hao.peng@kellogg.northwestern.edu Evanston, IL 60208 Twitter: (a)haoopeng Innovation, Leadership, Communication, Gender, Ethnicity, Disparity, Social Networks RESEARCH **INTERESTS EMPLOYMENT** Postdoctoral Fellow May 2022 - Present **Northwestern University** Evanston, IL, USA • Host: Brian Uzzi @NICO Graduate Student Research Assistant Sep. 2017 - May 2022 University of Michigan Ann Arbor, MI, USA Summer Research Intern May 2017/19 - July 2017/19 University of Southern California Los Angeles, USA • Host: Emilio Ferrara @ISI Summer Research Intern May 2016 - Aug. 2016 University of Pennsylvania Philadelphia, USA • Host: Lyle Ungar, M. Abdul-Mageed @WWBP **EDUCATION** Ph.D. in Information Science Sep. 2017 - May 2022 University of Michigan, School of Information Ann Arbor, MI, USA • Advisor: Daniel M. Romero M.S. in Data Science Sep. 2015 - May 2017 Bloomington, IN, USA Indiana University, School of Informatics • Advisors: Yong-Yeol Ahn, Filippo Menczer B.S. in Information Management Sep. 2011 - June 2015

PUBLICATIONS Journal Papers

- Is Novel Research Worth Doing? Evidence From Peer Review at 49 Journals M. Teplitskiy, H. Peng, A. Blasco, K.R. Lakhani PNAS 119, e2118046119 (2022)
- Dynamics of Cross-Platform Attention to Retracted Papers H. Peng, D.M. Romero, E.Á. Horvát

PNAS 119, e2119086119 (2022)

National Chengchi University, Business School

Sun Yat-Sen University

Summer Visiting Scholar

 Neural Embeddings of Scholarly Periodicals Reveal Complex Disciplinary Organizations

Guangzhou, China

Jun 2012 - Aug 2012

Taipei City

H. Peng, Q. Ke, C. Budak, D.M. Romero, Y.Y. Ahn Science Advances 7, eabbg004 (2021)

- 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)
- Sentiment Analysis of Web Reviews Based on Comparative Sentence Extraction
 H. Peng, J. Xu, Z. Xiao
 Data Analysis and Knowledge Discovery (2016)

Conference Papers

- Event-Driven Analysis of Crowd Dynamics in the BLM Online Social Movement H. Peng, C. Budak, D.M. Romero WWW (2019)
- Recognizing Pathogenic Empathy in Social Media
 M. Abdul-Mageed, A. Buffone, H. Peng, S. Giorgi, J. Eichstaedt, L. Ungar ICWSM (2017)
- Performance Dynamics and Success in Online Games
 A. Sapienza, H. Peng, E. Ferrara
 ICDM Workshop (2017)

Preprints

- The Gender Gap in Scholarly Self-Promotion on Social Media H. Peng, M. Teplitskiy, D.M. Romero, E.Á. Horvát (In Review)
- 11. Acceptance in Two Major Life Sciences Journals Shows Large Disparities Across Name-inferred Ethnicities
 - **H. Peng**, K.R. Lakhani, M. Teplitskiy (In Review)
- 12. Author Mentions in Science News Reveal Widespread Disparities Across Name-inferred Ethnicities
 - **H. Peng**, M. Teplitskiy, D. Jurgens (In Review)

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 Grant, 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 Regional Physics Competition, Hubei, China, 2010
- Third Prize in the National Physics Olympiad Contest, China, 2010

• CAA - Culture & Art Analytics (quest lecture for Ágnes Horvát) Spring 2023

University of Michigan

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

MEDIA COVERAGE

Selected News Reports

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

SELECTEDTALKS

Conference Presentations

1.	- Gender Differences in Scholarly Self-Promotion on Twitter	July 2022
2.	ICSSI, National Academy of Sciences, Washington, DC - Dynamics of Cross-Platform Attention to Retracted Papers	June 2022
3.	ICSSI, National Academy of Sciences, Washington, DC - The Gender Gap in Scholarly Self-Promotion on Twitter	June 2022
4.	IC2S2, ETH Zurich, Switzerland - Analyzing Online Attention to Retracted Papers	July 2021
5.	IC2S2, MIT	July 2020

- Network Modularity Controls the Speed of Information Diffusion

6. IC2S2, MIT July 2020

- Neural Embeddings of Scholarly Periodicals Reveal Complex Disciplinary Organizations

- 7. IC2S2, MIT July 2020
 - Say My Name, Say My Name: Author Mentions in Science Reporting Reveal Wide-Spread Ethnic Bias
- 8. WWW, San Francisco

May 2019

- Event-Driven Analysis of Crowd Dynamics in the Black Lives Matter Online Social Movement
- 9. IC2S2, Northwestern University

July 2018

- Event-Driven Modeling of Crowd Dynamics in online social movements
- 10. NetSci, Indianapolis

June 2017

- A quantitative framework for revealing disciplinary organizations of science

SERVICE

Conference Reviewer, PC Member

- WWW, WSDM, ICWSM
- CHI, CSCW
- IC2S2

Journal Reviewer

 Science Advances, Nature Human Behaviour, PLOS ONE, Transactions on the Web Scientometrics, Sage Open

REFERENCES

- Brian Uzzi
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 Northwestern University
- Daniel M. Romero drom@umich.edu University of Michigan
- Misha Teplitskiy tepl@umich.edu University of Michigan

- Emőke-Ágnes Horvát a-horvat@northwestern.edu Northwestern University
- Emilio Ferrara emiliofe@usc.edu
 University of Southern California
- Yong-Yeol Ahn yyahn@iu.edu Indiana University Bloomington