

# Lingfei Wu

---

## CONTACTS

Department of Sociology  
The University of Chicago  
Chicago, IL 60637, USA

Voice: (480)435-2217  
E-mail: [wlf850927@gmail.com](mailto:wlf850927@gmail.com)  
Homepage: [lingfeiwu.github.io](http://lingfeiwu.github.io)

## EMPLOYMENT

### The University of Chicago

Postdoctoral Fellow, Department of Sociology, 2016 - *present*

### Nanjing University

Adjunct Professor, School of Journalism and Communication, 2018 - *present*

### Arizona State University

Postdoctoral Researcher, Global Biosocial Complexity Initiative, 2014 - 2015

## EDUCATION

Ph.D. Communication, City University of Hong Kong, 2013

M.A. Communication, Peking University, 2009

B. A. Political Science, China University of Political Science and Law, 2006

## SELECTED PUBLICATIONS

- [Wu, L.](#), Wang, D., and Evans, J. A., (2019). Large teams develop and small teams disrupt science and technology. *Nature* (Cover), <https://doi.org/10.1038/s41586-019-0941-9>

*The New York Times* [Can Big Science Be Too Big?](#)

*The Atlantic* [Small Teams of Scientists Have Fresher Ideas](#)

*Forbes* [It Takes More Than Members to Make a Team](#)

*The Scientist* [Bigger Is Not Always Better for Team Science](#)

*Phys.org* [Bigger Teams Aren't Always Better in Science and Tech](#)

- Börner, K., Scrivner, O., Gallant, M., Ma, S., Liu, X., Chewning, K., [Wu, L.](#), Evans, J. A. (2018). Skill discrepancies between research, education, and jobs reveal the critical need to supply soft skills for the data economy. *Proceedings of the National Academy of Sciences (PNAS)*, 115(50), 12630-12637.

*Santa Fe Institute* [In an Age of Workplace Automation, Being Human Matters](#)

*Open Science MOOC* [Learning as Part of a Community Is a Powerful Skill](#)

- [Wu, L.](#), & Zhang, J. (2011). Accelerating growth and size-dependent distribution of human online activities. *Physical Review E*, 84(2), 026113.

*New Scientist* [Why Social Networks Are Sucking up More of Your Time](#)

*Science Daily* [Online Activity Grows in a Similar Pattern to Those of Real-Life Networks](#)

- [Wu, L.](#) (2011), The accelerating growth of online tagging systems. *European Physical Journal B*, 83(2), 283.

*Springer Select* [Predicting Collective Online Behavior](#)

## GRANTS

- National Science Foundation (NSF) Grant, \$592,772, Collaborative Research: Understanding Team Success and Failure, Co-PI (PI: James Evans and Dashun Wang), #1829344, 2018 - 2021.
- Australian Research Council (ARC) Discovery Grant, \$225,000, Understanding Online Attention and User-generated Content Creation, Co-PI (PI: Robert Ackland), #140103688, 2014 - 2016.
- Kaifeng Foundation, \$442,930, International Symposium on Complex Systems, Geometry, and Machine Learning, PI, 2016 - 2026.
- Tencent Research Institute, \$43,700, International Symposium on Artificial Neural Networks and Social Science, PI, 2018.

## BOOKS

- Wu, L. (2014). Data Mining in Social Sciences, <http://lingfeiw.gitbooks.io/data-mining-in-social-science>

## PUBLICATIONS

- Wu, L., Li, L., & Evans, J. (2018). Social connection induces cultural contraction: Evidence from hyperbolic embeddings of social and semantic networks. arXiv preprint [arXiv:1807.10216](https://arxiv.org/abs/1807.10216). Revise and resubmit, *Poetics*
- Wu, L., & Wang, C. J. (2016). Tracing the attention of moving citizens. *Scientific Reports*, 6, 33103.
- Wang, C. J., Wu, L., Zhang, J., & Janssen, M. A. (2016). The collective direction of attention diffusion. *Scientific Reports*, 6, 34059.
- Wang, C. J., & Wu, L. (2016). The scaling of attention networks. *Physica A: Statistical Mechanics and its Applications*, 448, 196-204.
- Wu, L., Baggio, J. A., & Janssen, M. A. (2016). The role of diverse strategies in sustainable knowledge production. *PLOS ONE*, 11(3), e0149151.
- Zhang, J., Li, X., Wang, X., Wang, W. X., & Wu, L. (2015). Scaling behaviours in the growth of networked systems and their geometric origins. *Scientific reports*, 5, 9767.
- Li, X., Wang, X., Zhang, J., & Wu, L. (2015). Allometric scaling, size distribution and pattern formation of natural cities. *Palgrave Communications*, 1, 15017.
- Wu, L., Zhang, J., & Zhao, M. (2014). The metabolism and growth of Web forums. *PLOS ONE*, 9(8), e102646.
- Wu, L., & Ackland, R. (2014). How Web 1.0 fails: The mismatch between hyperlinks and clickstreams. *Social Network Analysis and Mining*, 4(1), 202.

- Zhang J. and Wu, L. (2013), Allometry and dissipation of ecological networks. *PLOS ONE*, 8(9), e72525.
- Wu, L. and Zhang, J. (2013), The decentralized structure of collective attention on the Web. *European Physical Journal B*, 86(6), 266.
- Wu, L., Cai, Y., and Liu, D. (2011), Online shopping among Chinese consumers: An exploratory investigation of demographics and value orientation. *International Journal of Consumer Studies*, 35(4), 458.

## TEACHING

### Computational Social Science

*Introduction to Computational Social Science*. Nanjing University. 2017

*Data Mining and Visualization in Social Sciences*. Arizona State University. 2014

### Machine Learning

*Introduction to Artificial Neural Networks*. Nanjing University. 2018

*Web Data Mining Using Python*. Arizona State University. 2014

### Marketing

*Market Research and Data Mining* Peking University. 2008.

## TALKS

- Harvard Kennedy School, Center for International Development. 2018
- National Opinion Research Center (NORC). 2018.
- International Conference on Computational Social Science. 2018.
- Science of Team Science Conference. 2018.
- National Natural Science Foundation of China (NSFC). 2018.
- Science of Team Science Conference. 2017.
- International Conference on Social Informatics. 2014.
- International Communication Association Conference. 2012.
- Nanyang Technological University. School of Communication and Information. 2011.
- Commonwealth Scientific and Industrial Research Organization (CSIRO). 2011.
- Australian National University, Demographic & Social Research Institute. 2011.
- Wolfram Research. 2010.
- Agricultural and Applied Economics Association Conference. 2009.
- ACM Web Science Conference. 2009.

## SERVICE

### Co-Founder

- Swarma Club (Beijing). Since 2009
- Nanjing University, the Computational Communication Collaboratory. Since 2013

Program committee member

- International Symposium on Complex Systems, Geometry, and Machine Learning. 2016 - 2018
- International Symposium on Artificial Neural Networks and Social Science. 2018
- Tsinghua Workshop on AI and Public Policy. 2017
- Conference on Complex Systems, Computational Social Science Satellite Workshop.

Reviewer

- *Physica A: Statistical Mechanics and its Applications*

INDUSTRIAL  
POSITIONS

Tencent Research Institute, Consultant, 2018 - *present*  
Baidu, Inc., 2013

SKILLS

Python, R, JavaScript, Mathematica, STATA, IBM SPSS, SQL, Adobe Illustrator, Processing.

REFERENCES

James A. Evans  
Title: Professor  
Affiliation: Department of Sociology, The University of Chicago  
Email: jevans@uchicago.edu  
Address: Social Sciences 420, 5801 S Ellis Ave, Chicago, IL 60637

Dashun Wang  
Title: Associate Professor  
Affiliation: Kellogg School of Management, Northwestern University  
Email: dashunwang@gmail.com  
Address: Global Hub 5177, 2211 Campus Drive, Evanston, IL 60208

Robert Ackland  
Title: Associate Professor  
Affiliation: School of Sociology, Australian National University  
Email: robert.ackland@anu.edu.au  
Address: HA2159, Haydon Allen Building,  
The Australian National University, Canberra, Australia