# Junjun Yin, Ph.D.

Population Research Institute, Social Science Research Institute, The Pennsylvania State University, State College, PA, 16801, USA

#### A. PROFESSIONAL PREPARATION

Univ. of Illinois at Urbana-Champaign	Geographic Information Science	Postdoctoral	2016
Dublin Institute of Technology	Spatial Information Science	Ph.D.	2013
Univ. of Gävle	Geoinformatics	M.S.	2009
Univ. of Electronic Sci. & Tech. of China	Electronics & Engineering	B.S.	2006

#### **B. APPOINTMENTS**

Pennsylvania State University (2016–present)

Research Associate, the Computational and Spatial Analysis Core of the Population Research Institute, Social Science Research Institute

University of Illinois at Urbana-Champaign (2016)

Lecturer, Department of Geography and Geographic Information Science

University of Illinois at Urbana-Champaign (2014–2016)

Postdoctoral Research Associate, Department of Geography and Geographic Information Science; CyberGIS Center for Advanced Digital and Spatial Studies; National Center for Supercomputing Applications

#### C. SELECTED PUBLICATIONS

**Selected Peer-reviewed journals** 

- **Yin, J.**, Soliman, A., Yin, D. and Wang, S. 2017. Delineate urban boundaries in Great Britain from the network of large scale Twitter user spatial interactions. *International Journal of Geographical Information Science*, pp. 1-21, http://dx.doi.org/10.1080/13658816.2017.1282615
- **Yin, J.**, Gao, Y., Du, Z. and Wang, S. 2016. Exploring Multi-Scale Spatiotemporal Twitter User Mobility Patterns with a Visual-Analytics Approach. *ISPRS International Journal of Geo-Information*, 5(10):187
- Jiang, B., Ma, D., Yin, J. and Sandberg, M. 2016. Spatial Distribution of Tweet Numbers and Densities in Cities. *Geographical Analysis*, DOI: 10.1111/gean.12096
- Jiang, B., **Yin, J.** and Liu, Q. 2015. Zipf's Law for All the Natural Cities around the World. *International Journal of Geographical Information Science*, 29(3), pp. 498-522
- Jiang, B. and **Yin, J.** 2014. Ht-Index to Quantify the Fractal or Scaling Structure of Geographic Features. *Annals of the Association of American Geographers*, pp. 1–12
- **Yin, J.** and Carswell, J.D. 2013. Spatial Search Techniques for Mobile 3D Queries in Sensor Web Environments. *ISPRS International Journal of Geo-Information*, 2(1): pp.135-154
- Carswell, J.D., Gardiner, K. and **Yin, J.** (2010). Mobile Visibility Querying for LBS. *Transactions in GIS*, 14(6): pp. 791-809, Wiley online library
- Jiang, B., Yin, J. and Zhao, S., 2009. Characterizing the human mobility pattern in a large street network. *Physical Review E*, 80(2), p.021136
- Jiang, B., Zhao, S. and Yin, J. 2008. Self-organized natural roads for predicting traffic flow: a sensitivity study. *Journal of statistical mechanics: Theory and experiment*, P07008, IOP Publishing

## Selected Peer-reviewed lecture notes and conference papers

- Yin, J., Gao, Y. and Wang, S. 2017. Urban Sensing from Volunteered Citizen Participation using Mobile Devices. In Seeing Cities through Big Data: Research, Methods and Applications in Urban Informatics, Springer
- Soliman, A., Yin, J., Soltani, K., Padmanabhan, A., and Wang, S. 2015. Where Chicagoans tweet the
  most: Semantic analysis of preferential return locations of Twitter users, 1<sup>st</sup> International Workshop
  on Smart Cities and Urban Analytics 2015, 23rd ACM SIGSPATIAL International Conference on
  Advances in Geographic Information Systems
- Yin, J. and Carswell, J.D. (2012). Effects of Variations in 3D Spatial Search Techniques on Mobile Query Speed vs Accuracy. Web and Wireless Geographical Information Systems, Naples, Italy. (\*Best paper award)

## **D. Ongoing Research Projects**

PI. "A cloud computing enabled GIS platform for the integration and synthesis of multi-layer geospatial data sources in urban studies: Understanding urban dynamics from geospatial Big Data". Microsoft Azure Data Science Research Award, \$20,000. Project dates: 12/04/2016—12/03/2017.

Co-PI. "Ecological Migration in a Large-Scale Quasi-Experiment Design in China: Implications of Climate Change, Landscape Structure, Ecosystem Services and Government Intervention". IEEE Seed Grant Program, \$25,000. Project dates: 04/15/2017—06/30-2018

PI. "Mining Twitter User Demographics as a First-Step in Big Data for Population Research". XSEDE (Extreme Science and Engineering Discovery Environment) Startup computational resource allocation award, \$2,794.78 (50,000 SUs). Project dates: 03/27/2017—03/26-2018

### E. Service to the Profession

### **Program committees**

Session Chair for *Big Movement Data for Geospatial Analytics on Urban Interactions*, Symposium on Human Dynamics in Smart and Connected Communities, 2017 AAG Annual Meeting, Boston, Massachusetts, April 5 - April 9, 2017

Session Chair for *Understanding Urban Dynamics Based on Movement Big Data*, 2016 AAG Annual Meeting, San Francisco, California, March 29 - April 2, 2016

Program committee member for *International Conference on Location-based Social Media Data*, Athens, Georgia, USA, March 5-7, 2015

### **Reviewer for Journals**

Reviewer for International Journal of Geographical Information Science (IJGIS) (2010, 2014, 2015, 2016, 2017); Computers, Environment and Urban Systems (CEUS) (2009, 2010, 2013, 2014, 2015, 2016); Geographical Analysis (2016, 2017); Journal of Geographical Systems (2016); Demography (2016); Environment and Planning B: Planning and Design (2016); Science China (2015); PLOS One (2013, 2015); Cities (2014); ISPRS International Journal of Geo-Information (2013, 2014, 2015); Journal of Location Based Services (2013)