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Affiliations

Vocational

- 2017–now **Associate Professor**, Beijing, China.
State Key Laboratory of Resources & Environmental Information System,
Institute of Geographic Sciences & Natural Resources Research,
Chinese Academy of Sciences
- 2019–2020 **Research Scientist**, Sustainable Urbanization Lab, Massachusetts Institute of
Technology (MIT), Boston, USA.
Sustainable Urbanization Lab, MIT: <https://sul.mit.edu/>
- 2015–2017 **Assistant Professor**, Beijing, China.
State Key Laboratory of Resources & Environmental Information System,
Institute of Geographic Sciences & Natural Resources Research,
Chinese Academy of Sciences
- 2017–now **Associate Professor**, Beijing, China.
University of Chinese Academy of Sciences

Miscellaneous

- 2020–now **Research affiliate**, Sustainable Urbanization Lab, Massachusetts Institute of Tech-
nology (MIT), Boston, USA.
MIT-SUL Lab, MIT: <https://sul.mit.edu/>
- 2013–now **Associate Directors**, Beijing City Lab, Beijing, China.
Beijing City Lab: <https://www.beijingcitylab.com/>
- 2012.9–11 **Visiting Scholar**, Wageningen, the Netherlands.
Department of Soil Geography and Landscape & ISRIC - World Soil Information, Wageningen
University

Education

- 2010–2014 **Ph.D**, *Institute of Geographic Sciences & Natural Resources Research, Chinese
Academy of Sciences, Beijing, China.*
Supervised by Prof. Chenhu Zhou, Academician of CAS; Prof. Yong Ge; and Prof. Gerard
B.M. Heuvelink
Thesis title: Space-Time Geostatistical Model-based Monitoring Network Optimization and
Space-Time Interpolation

- 2007–2010 **M.Sc.**, *Institute of Geographic Sciences & Natural Resources Research, Chinese Academy of Sciences, Beijing, China.*
Supervised by Prof. Yong Ge
Thesis title: Analysis on the Uncertainty of Remote Sensing Image Geometric Correction
- 2003–2007 **B.Sc.**, *Hohai University, Nanjing, China.*
Major in GIS

Awards and Honors

- 2021 Best Paper Award 2020, Chinese Scientists, Cell Press
- 2019 Youth Innovation Promotion Association, Chinese Academy of Sciences
- 2017 Youth Talent Scientist Innovation Program in Remote Sensing, Chinese Ministry of Science and Technology
- 2015 Young Scholar Nomination Paper Award, The 4th International Workshop on Regional, Urban and Spatial Economics in China
- 2015 Outstanding Graduates of IGSNRR, Chinese Academy of Sciences
- 2013, 2014 “three-good students” award of Chinese Academy of Sciences
- 2012 National Scholarship for Ph.D
- 2011, 2012 “three-good students” award of Chinese Academy of Sciences
- 2010 Outstanding Graduates of Chinese Academy of Sciences
- 2008, 2009 “three-good students” award of Chinese Academy of Sciences

Association Membership

- secretary-general Cartography and GIS Special Committee, **The Geographical Society of China**
- secretary-general Resources Mapping Special Committee, **China Society of Natural Resources**
- committee member Urban Big Data Special Committee, **Chinese Society for Urban Studies**
- member **American Association of Geographers (AAG)**
- member **The Geographical Society of China**
- member **China Computer Society**

Teaching Experience

- 2015-2021 **Geographical Information Science Tutorial and Practice**, *University of Chinese Academy of Sciences.*
undergraduates, 200 students, 20 class hours
- 2016-2021 **Modern Cartography – Web Cartography**, *University of Chinese Academy of Sciences.*
undergraduates, 60–80 students, 4 class hours

- 2018 **Applications of Geographic Information Systems - Urban Sensing and Computing**, *University of Chinese Academy of Sciences*.
undergraduates, 50 students, 6 class hours
- 2016 **Map Design and Making – Geo-spatial Big Data Mapping**, *University of Chinese Academy of Sciences*.
undergraduates, 20–30 students, 3 class hours, Invited by Prof. Yingjie Wang
- 2017 **An Introduction to Urban Sensing and Computing**, *Tsinghua University*.
undergraduates, 100 students, 2 class hours, Invited by Prof. Ying Long
- 2016 **Spatio-temporal Big Data Analysis and Visualization**, *Tsinghua University*.
undergraduates, 100 students, 4 class hours, Invited by Prof. Ying Long

Skills and Expertise

- Major GIScience, Remote Sensing, Econometrics, Causal Inference, Spatial Statistics, Urban Studies, Behaviour Science, Environments
- Basic Linux, MacOS, Windows, R, Python, SQL, C++, Shell, Javascript, HTML, L^AT_EX, Markdown, Github
- Expertise OSGeo, ArcGIS, ENVI, GDAL/OGR, SAGA, GRASS, QGIS, STATA, PostGIS, Mapbox, CartoDB, Web Map, Cloud Computation

Languages

- Chinese** *mother tongue*
- English** *first foreign language*

Research Projects

Principle-Investigator

- 2020–2024 **The Youth Innovation Promotion Association Project**, *Chinese Academy of Sciences*, No. 2020052.
- 2019–2022 **The effect of air pollution on urbanites behaviour and expressed sentiment: Spatio-temporal big data approach**, *The National Natural Science Foundation of China*, (No. 41971409).
- 2018–2019 **Novel Measures of Air Pollution’s Social Costs in China: Big Data Analysis**, *MISTI Global Seed Funds*, Co-PI with Prof Siqi Zheng @ MIT CFC Lab.
- 2017–2019 **Research on space-time geostatistical model-based ecological environment monitoring network optimization**, *The National Natural Science Foundation of China*, (No. 41601427).
- 2016–2020 **Key Theory and Method for Validation of Land Surface Remote Sensing Products - Project 1: Theory and Methods**, *The Key Program of the National Natural Science Foundation of China*, (No. 41531174).
- 2016–2017 **Research on Human Mobility Pattern in Multiple Spatial Scales Through Geotagged Social Media Network**, *Open Research Fund Program of Shenzhen Key Laboratory of Spatial Smart Sensing and Services, Shenzhen University*.

- 2015–2017 **Geographic Knowledge Integrated Spatio-Temporal Mapping**, *LREIS, Chinese Academy of Sciences*.
[Co-Investigator](#)
- 2017–2022 **Evaluation of the Sustainable Development of Jing-Jin-Ji Metropolitan Region**, @ *Panorama Evaluation of the Beauty of China*, the Strategic Priority Research Program of the Chinese Academy of Sciences, (Grant No. XDA19040503), PI: Prof Xiaohan Liao.
- 2017–2021 **Simulation and Early Warning of Geographical Events**, @ *Geographic Big Data Mining and Spatio-temporal Pattern Discovery*, the National Key Research and Development Program (Grant No: 2017YFB0503600), PI: Prof Tao Pei.
- 2017–2021 **Panoramic Mapping and Service Platform**, @ *Panoramic Mapping Acquisition and Location Information Aggregation Technology*, the National Key Research and Development Program (Grant No: 2017YFB0503500), PI: Prof Guonian LV.
- 2016–2020 **Pan-spatial Information in Regional Interaction Research**, @ *Pan-spatial Information System Computation and Analytics*, the Key Program of Frontier Science in CAS (No. QYZDY-SSW-DQC007), PI: Prof Academician Chenhu ZHOU.
- 2015–2020 **Human Mobility Pattern in Multiple Scales**, @ *Spatio-temporal Big Data Analysis*, Science Fund for Creative Research Groups of the National Natural Science Foundation of China (No. 41421001), PI: Prof Academician Chenhu ZHOU.
- 2016–2018 **Geospatial Big Data Mining for Extreme Events Early Warning**, @ *Relying on Big Data to Build Extreme Events Early Warning and Decision-making Simulation Platform*, Cultivate Project of Institute of Geographic Sciences and Natural Resources Research, CAS, (No.TSYJS03), PI: Prof Yong GE.
- 2012–2015 **General Methods for the Validation of Terrestrial Quantitative Remote Sensing Products**, @ *Key Techniques for the Validation of Remote Sensing Products*, National High Technology Research and Development Program of China (No. 2012AA12A305), PI: Prof Xin LI.
- 2012–2016 **Monitoring Network Optimization**, @ *Monitoring Network Design for China's Floating Population*, Key Technologies Research and Development Program of China (No. 2012BAI32B06), PI: Prof Xiaohuan YANG.

Journal Referees

- 2016 *Annals of the Association of American Geographers*
- 2014 *Applied Spatial Analysis and Policy*
- 2015 *Cartography and Geographic Information Science*
- 2016, 2021 *Computer, Environment and Urban System*
- 2012, 2018 *Earth Science Informatics*
- 2015 *Habitat International*
- 2015 *IEEE Transactions on Geoscience and Remote Sensing*
- 2015, 2017 *IEEE Geoscience and Remote Sensing Letters*
- 2012, 2014 *International Journal of Applied Earth Observation and Geoinformation*

2013, 2016a, International Journal of Geographical Information Science
2016b, 2016c,
2018, 2020,
2021
2016, 2017 ISPRS International Journal of Geo-Information
2014 Journal of Geographical Sciences
2015 Journal of Urban Management
2013 Journal of Selected Topics in Applied Earth Observations and Remote Sensing
2021 Lancet Planetary Health
2019,2021 Nature Human Behavior
2015 Remote Sensing
2011 Remote Sensing of Environment
2015, 2016a, Spatial Statistics
2016b, 2016c

PUBLICATIONS

Peer-Reviewed Journal Articles

2022

Wang, J., Fan, Y., Palacios, J., Chai, Y., Guetta-Jeanrenaud, N., Obradovich, N., Zhou, C., & Zheng, S. (2022). Global evidence of expressed sentiment alterations during the COVID-19 pandemic. **Nature Human Behaviour**, 6(3), 349-358.

Cheng, Z., **Wang, J.**, & Ge, Y. (2022). Mapping monthly population distribution and variation at 1-km resolution across China. *International Journal of Geographical Information Science*, 36(6), 1166-1184

Palacios, J., Fan, Y., Yoeli, E., **Wang, J.**, Chai, Y., Sun, W., ... & Zheng, S. (2022). Encouraging the resumption of economic activity after COVID-19: Evidence from a large scale-field experiment in China. *Proceedings of the National Academy of Sciences*, 119(5), e2100719119.

Ge, Y., Zhang, W. B., Wu, X., Ruktanonchai, C. W., Liu, H., **Wang, J.**, ... & Lai, S. (2022). Untangling the changing impact of non-pharmaceutical interventions and vaccination on European Covid-19 trajectories. *Nature Communications*, 13, 3106.

2021

Liu, Y., Zhou, B., **Wang, J.**, & Zhao, B. (2021). Health benefits and cost of using air purifiers to reduce exposure to ambient fine particulate pollution in China. *Journal of Hazardous Materials*, 414, 125540.

Yin, J., Dong, J., Hamm, N. A., Li, Z., **Wang, J.**, Xing, H., & Fu, P. (2021). Integrating remote sensing and geospatial big data for urban land use mapping: A review. *International Journal of Applied Earth Observation and Geoinformation*, 103, 102514.

Ge, Y., Zhang, W. B., **Wang, J.**, Liu, M., Ren, Z., Zhang, X., ... & Tian, Z. (2021). Effect of different resumption strategies to flatten the potential COVID-19 outbreaks amid society reopens: a modeling study in China. *BMC public health*, 21(1), 1-10.

Chai, Y., Palacios, J., **Wang, J.**, Fan, Y., & Zheng, S. (2021). Measuring daily-life fear perception change: a computational study in the context of COVID-19. *arXiv preprint arXiv:2107.12606*.

Fu, L., Kang, H., **Wang, J.**, Yao, L., Wang, X., & Zhou, C. (2021). Exploring the Disproportion Between Scientific Productivity and Knowledge Amount. *arXiv preprint arXiv:2106.02989*.

2020

Wang, J., Obradovich, N., & Zheng, S. (2020). A 43-million-person investigation into weather and expressed sentiment in a changing climate. *One Earth*, 2(6), 568-577.

Zheng, S., **Wang, J.**, & Dong, L. (2020). Urban network and vibrancy. *Habitat International*, 106(102290), 102290.

Shao, Y., Ma, Z., **Wang, J.**, & Bi, J. (2020). Estimating daily ground-level PM_{2.5} in China with random-forest-based spatiotemporal kriging. *Science of The Total Environment*, 740, 139761.

Xin, X., Jin, D., Ge, Y., **Wang, J.**, Chen, J., Qi, J., ... & Tang, H. (2020). Climate change dominated long-term soil carbon losses of Inner Mongolian grasslands. *Global Biogeochemical Cycles*, 34(10), e2020GB006559.

Zhang, Y., Liu, S., Hu, X., **Wang, J.**, Li, X., Xu, Z., ... & Yang, X. (2020). Evaluating Spatial Heterogeneity of Land Surface Hydrothermal Conditions in the Heihe River Basin. *Chinese Geographical Science*, 30(5), 855-875.

Zhang, W., Derudder, B., **Wang, J.**, & Witlox, F. (2020). An analysis of the determinants of the multiplex urban networks in the Yangtze River Delta. *Tijdschrift voor economische en sociale geografie*, 111(2), 117-133.

Liu, W., Wu, W., Thakuria, P., & **Wang, J.** (2020). The geography of human activity and land use: A big data approach. *Cities*, 97, 102523.

Wang, P., Ma, Y., Zhao, X., Wang, B., **Wang, J.**, & Gao, F. (2020). Regional differences and influential factors of open public space in Chinese cities based on Big Earth Data. *Sustainability*, 12(6), 2514.

2019

Zheng, S., **Wang, J.** [co-first leading author], Sun, C., Zhang, X., & Kahn, M.E. (2019). Air pollution lowers Chinese urbanites' expressed happiness on social media, *Nature Human Behaviour*, <https://doi.org/10.1038/s41562-018-0521-2>

Ge, Y., Hu, S., Ren, Z., Jia, Y., **Wang, J.**, Liu, M., ... & Chen, Y. (2019). Mapping annual land use changes in China's poverty-stricken areas from 2013 to 2018. *Remote Sensing of Environment*, 232, 111285.

Ge, Y., Jin, Y., Stein, A., Chen, Y., **Wang, J.**, Wang, J., ... & Atkinson, P. M. (2019). Principles and methods of scaling geospatial Earth science data. *Earth-science reviews*, 197, 102897.

Sun, C., Zheng, S., **Wang, J.**, & Kahn, M. E. (2019). Does clean air increase the demand for the consumer city? Evidence from Beijing. *Journal of Regional Science*, 59(3), 409-434.

Zheng, S., Zhang, X., Sun, W., & **Wang, J.** (2019). The effect of a new subway line on local air quality: A case study in Changsha. *Transportation research part D: transport and environment*, 68, 26-38.

Ma, T., Zhu, R., **Wang, J.**, Zhao, N., Pei, T., Du, Y., Zhou, C. & Chen, J. A proportional odds model of human mobility and migration patterns. *International Journal of Geographical Information Science*, 33(1), 81-98. <https://doi.org/10.1080/13658816.2018.1514608>

2018

Wu, W., **Wang, J.H.***, Dai, T. S., & Wang, X. (2018). The Geographical Legacies of Mountains: Impacts on Cultural Difference Landscapes, *Annals of the Association of American Geographers*, 108(1), 277-290. <http://dx.doi.org/10.1080/24694452.2017.1352481>

Jin, Y., Ge, Y.*, **Wang, J.H.***, Heuvelink, G. B. M., & Atkinson, P. Downscaling AMSR-2 Soil Moisture Data with Geographically Weighted Area-to-Area Regression Kriging, *IEEE Transactions on Geoscience and Remote Sensing*, 56(4), 2362-2376. <http://dx.doi.org/10.1109/TGRS.2017.2778420>

Jin, Y., Ge, Y.*, **Wang, J.H.***, & Heuvelink, G. B. M. (2018). Deriving temporally continuous soil moisture estimations at fine resolution by downscaling remotely sensed product, *International Journal of Applied Earth Observation and Geoinformation*, 68, 8-19. <https://doi.org/10.1016/j.jag.2018.01.010>

Jin, Y., Ge, Y.*, **Wang, J.H.***, Heuvelink, G.B.M., & Wang, L. (2018). Geographically Weighted Area-to-Point Regression Kriging for Spatial Downscaling in Remote Sensing. *Remote Sensing*, 10(4), 579. <https://doi.org/10.3390/rs10040579>

Zhang, W., Derudder, B., **Wang, J.H.***, Shen, W. (2018). Regionalisation in the Yangtze River Delta (China) from the perspective of inter-city daily mobility. *Regional Studies*, 52(4), 528-541. <http://dx.doi.org/10.1080/00343404.2017.1334878>

Cai, B., Li, W., Dhakal, S., & **Wang, J.H.** (2018). Source data supported high resolution carbon emissions inventory for urban areas of the Beijing-Tianjin-Hebei region: Spatial patterns, decomposition and policy implications, *Journal of Environmental Management*, 206, 786-799. <https://doi.org/10.1016/j.jenvman.2017.11.038>

Li, X., Liu, S., Li, H., Ma, Y., **Wang, J.H.**, Zhang, Y., et al. (2018). Intercomparison of six upscaling evapotranspiration methods: From site to the satellite pixel. *Journal of Geophysical Research: Atmospheres*, 123. <https://doi.org/10.1029/2018JD028422>

Jia, Y., Ge, Y., Ling, F., Guo, X., **Wang, J.H.**, Wang, L., Chen, Y. & Li, X. (2018). Urban Land Use Mapping by Combining Remote Sensing Imagery and Mobile Phone Positioning Data, *Remote Sensing*, 10(3), 446. <https://doi.org/10.3390/rs10030446>

Lei, C., Zhang, A., Qi, Q., Su, H., & **Wang, J.H.** (2018). Spatial-Temporal Analysis of Human Dynamics on Urban Land Use Patterns Using Social Media Data by Gender, *ISPRS International Journal of Geo-Information*, 7(9), 358. <https://doi.org/10.3390/ijgi7090358>

2017

Wu, W. & **Wang, J.H.***. (2017). Gentrification Effects of China's Urban Village Renewals, *Urban Studies*, 54(1), 214-229. <http://dx.doi.org/10.1177/0042098016631905>

2016

Wang, J.H., Deng, Y., Song C., & Tian D. (2016). Measuring time accessibility and its spatial characteristics in the urban areas of Beijing. *Journal of Geographical Sciences*, 26(12), 1754-1768. <http://dx.doi.org/10.1007/s11442-016-1356-2>

Wu, W., **Wang, J.H.***, & Dai, T. S. (2016). The Geography of Cultural Ties and Human Mobility: Big Data in Urban Contexts, *Annals of the Association of American Geographers*, 106(3), 612-630. <http://dx.doi.org/10.1080/00045608.2015.1121804>

Li Z., **Wang, J.H.** [co-first leading author], Tang, H., Huang, C., Yang, F., Chen, B., Wang, X., Xin, X., Ge, Y. (2016). Predicting Grassland Leaf Area Index in the Meadow Steppes of Northern China: A Comparative Study of Regression Approaches and Hybrid Geostatistical Methods. *Remote Sensing*, 8(8), 632. <http://dx.doi.org/10.3390/rs8080632>

Zhang, W., Derudder, B., **Wang, J.H.**, Shen, W & Witlox, F. (2016). Using Location-Based Social Media to Chart the Patterns of People Moving between Cities: The Case of Weibo-Users in the Yangtze River Delta. *Journal of Urban Technology*, 23(3), 91-111. <http://dx.doi.org/10.1080/10630732.2016.1177259>

Zheng, S., Hu, X., **Wang J. H.**, & Wang, R. (2016). Subways near the subway: Rail transit and neighborhood catering businesses in Beijing, *Transport Policy*, 51, 81-92. <http://dx.doi.org/10.1016/j.tranpol.2016.03.008>

Zhang, W. Y., Derudder, B., **Wang J. H.**, & Witlox, F. (2016). Approximating actual flows in physical infrastructure networks: the case of the Yangtze River Delta high-speed railway network, *Bulletin of Geography. Social-Economic Series*, 31, 145-160. <http://dx.doi.org/10.1515/bog-2016-0010>

2015

Wang, J.H., Ge, Y., Heuvelink, G. B. M., & Zhou, C. H. (2015). Upscaling in-situ soil moisture observation to pixel averages with space-time geostatistics. *Remote Sensing*, 7(9), 11372-11388. <http://doi.org/10.3390/rs70911372>

Ge, Y., **Wang, J.H.**, Heuvelink, G. B. M., Jin, R., Li, X., & Wang, J. F. (2015). Sampling design optimization of a wireless sensor network for monitoring ecohydrological processes in the Babao River basin, China. *International Journal of Geographical Information Science*, 29(1), 92-110. <http://doi.org/10.1080/13658816.2014.948446>

Liu, X., & **Wang J. H.***. (2015) The geography of Weibo. *Environment and Planning A*, 47(6), 1231-1234. <http://doi.org/10.1177/0308518x15594912>

Hu, M. G., **Wang, J.H.**, Ge, Y., Liu, M. X., Liu, S. M., Xu, Z. W., Xu, T. R. (2015). Scaling Flux Tower Observations of Sensible Heat Flux Using Weighted Area-to-Area Regression Kriging. *Atmosphere*, 6, 1032-1044. <http://doi.org/10.3390/atmos6081032>

Wu, T. J., Ge, Y., **Wang, J.H.**, Stein, A., Song, Y. Z., Du, Y. Y., & Ma, J. H. (2015). A WTLS-based method for remote sensing imagery registration. *IEEE Transactions on Geoscience and Remote Sensing*, 53(1), 102-116. <http://doi.org/10.1109/Tgrs.2014.2318705>

Ge, Y., Liang, Y. Z., **Wang, J.H.**, Zhao, Q. Y., & Liu, S. M. (2015). Upscaling sensible heat fluxes with area-to-area regression kriging. *IEEE Geoscience and Remote Sensing Letters*, 12(3), 656-660. <http://doi.org/10.1109/Lgrs.2014.2355871>

Liu, X.J., Song, Y., Wu, K., Wang, J.H., Li, D., & Long, Y. (2015). Understanding urban China with open data, *Cities*, 47, 53-61. <http://dx.doi.org/10.1016/j.cities.2015.03.006>

Cai, B., Wang, J., Long, Y., Li, W., Liu, J., Ni, Z., Bo, X., Li, D., **Wang, J.H.**, Chen, X.J., Gao, Q.X., Zhang, L. (2015) Evaluating the impact of odors from the 1955 landfills in China using a bottom-up approach. *Journal of Environmental Management*, 164, 206-214. <http://dx.doi.org/10.1016/j.jenvman.2015.09.009>

2014

Wang, J.H., Ge, Y., Heuvelink, G. B. M., & Zhou, C. H. (2014). Spatial sampling design for estimating regional GPP with spatial heterogeneities. *IEEE Geoscience and Remote Sensing Letters*, 11(2), 539-543. <http://doi.org/10.1109/Lgrs.2013.2274453>

Wang, J.H., Ge, Y., Song, Y. Z., & Li, X. (2014). A geostatistical approach to upscale soil moisture with unequal precision observations. *IEEE Geoscience and Remote Sensing Letters*, 11(12), 2125-2129. <http://doi.org/10.1109/Lgrs.2014.2321429>

Ge, Y., Avitabile, V., Heuvelink, G. B. M., **Wang, J.H.**, & Herold, M. (2014). Fusion of pan-tropical biomass maps using weighted averaging and regional calibration data. *International Journal of Applied Earth Observation and Geoinformation*, 31, 13-24. <http://doi.org/10.1016/j.jag.2014.02.011>

Kang, J., Li, X., Jin, R., Ge, Y., Wang, J. F., & **Wang, J.H.** (2014). Hybrid optimal design of the eco-hydrological wireless sensor network in the middle reach of the Heihe river basin, China. *Sensors*, 14(10), 19095-19114. <http://doi.org/10.3390/S141019095>

Ding, Y. L., Ge, Y., Hu, M. G., Wang, J. F., **Wang, J.H.**, Zheng, X. M., & Zhao, K. (2014). Comparison of spatial sampling strategies for ground sampling and validation of MODIS LAI products. *International Journal of Remote Sensing*, 35(20), 7230-7244. <http://doi.org/10.1080/01431161.2014.967889>

2012

Wang, J.H., Ge, Y., Heuvelink, G. B. M., Zhou, C. H., & Brus, D. (2012). Effect of the sampling design of ground control points on the geometric correction of remotely sensed imagery. *International Journal of Applied Earth Observation and Geoinformation*, 18, 91-100. <http://doi.org/10.1016/j.jag.2012.01.001>

Ge, Y., Wu, T. J., **Wang, J.H.**, Ma, J. H., & Du, Y. Y. (2012). Scaled total-least-squares-based registration for optical remote sensing imagery. *Earth Science Informatics*, 5(3-4), 137-152. <http://doi.org/10.1007/s12145-012-0103-1>

2011

Wang, L., Deng, Y., Liu, S. H., & **Wang, J.H.** (2011). Research on urban spheres of influence based on improved field model in central China. *Journal of Geographical Sciences*, 21(3), 489-502. <http://doi.org/10.1007/s11442-011-0859-0>

2010

Deng, Y., Liu, S. H., Wang, L., Ma, H. Q., & **Wang, J.H.** (2010). Field modeling method for identifying urban sphere of influence: A case study on central China. *Chinese Geographical Science*, 20(4), 353-362. <http://doi.org/10.1007/s11769-010-0408-2>

Deng, Y., Liu, S. H., Zhang, W. T., Wang, L., & **Wang, J.H.** (2010). General multidimensional cloud model and its application on spatial clustering in Zhanjiang, Guangdong. *Journal of Geographical Sciences*, 20(5), 787-798. <http://doi.org/10.1007/s11442-010-0811-8>

Book Chapter

2018 Zhou, C.H., Pei, T., Xu, J., Ma, T., Fan, Z.D., & **Wang, J.H.** (2018). Urban Dynamics and GIScience. In *Comprehensive Geographic Information Systems*, edited by Bo Huang, Elsevier, Oxford, 2018, Pages 297-312, ISBN 9780128047934, <https://doi.org/10.1016/B978-0-12-409548-9.10539-1>.

2017 Pei, T., Xu, J., Gong, J., Liu, X., **Wang, J.H.**, Du, S., Qin, C., Yang, L. & Wan, Y. (2017). *Spatial Analysis and Simulation. The Geographical Sciences During 1986—2015: From the Classics To the Frontiers* (pp. 339-366). Singapore: Springer Singapore.

Working Paper

2016

Zhang, P., **Wang, J.H.** [co-first leading author] & Zhang, J.J., Can China Feed Itself under Climate Change? A High-Resolution Analysis. *Social Science Research Network*, (August 10, 2016), Available at SSRN: <http://ssrn.com/abstract=2821412>.

Wu, W., **Wang, J.H.**, Li, C., & Wang, M., The Geography of City Liveliness and Land Use Configurations: Evidence from Location-Based Big Data in Beijing. Spatial Economic Research Center (SERC) Discussion Paper 201, http://cep.lse.ac.uk/_new/publications/abstract.asp?index=5128

2014

Long, Y., **Wang, J.H.** [co-first leading author], Wu, K., Zhang, J.J., Population exposure to ambient PM2.5 at the subdistrict level in China. Available at SSRN. <http://dx.doi.org/10.2139/ssrn.2486602>.

Long, Y., Wu, K., **Wang, J.H.**, Shen, Z.J., Big models: From Beijing to the whole China. <http://arxiv.org/abs/1406.6417>

Papers Presented at Academic and Professional Conferences

2017

Yan, J., Ge, Y., **Wang, J.H.**, Validation of the coarse-scale remotely sensed soil moisture data by using ground measurements with a hybrid geostatistical downscaling method, Pedometrics 2017, June 26- July 1, 2017, Wageningen, the Netherlands.

Zheng, S., **Wang, J.H.**, Kahn, M.E., & Zhang, X., Air Pollution, Avoidance Behavior and Happiness in Chinese Cities: Evidence From Social Media Data. American Economic Association 2017 Annual Meeting, Jan. 6-8, 2017, Chicago IL, USA.

2016

Wang, J.H., Chinese footprint and mobility: New evidence from geospatial big data. China Society of Natural Resources 2016 Annual Meeting, Oct. 14-16, 2016, Wuhu, Anhui, China.

Wang, J.H., Liu, X., Wu, W., Zhang, W., Ge, Y., Chinese footprint and mobility: New evidence from geospatial big data. Chinese GIS Theory and Method Association 2016 Annual Meeting, Sep. 23-25, 2016, Shenzhen, China.

Wang, J.H., Wu, W., Mountain and Chinese Socio-Cultural Geography: A Geospatial Big Data Approach. The Second International Conference on Location-based Social Media Data, August 26-28, 2016, Shanghai, China.

Liu, X., Derudder, B., **Wang, J.H.**, Mapping intercity air transport networks: connections, prices, and options. The 33rd International Geographical Congress, August 21-25, 2016, Beijing, China.

Yan, J., Ge, Y., **Wang, J.H.**, Chen, Y., Guan, X., Downscaling of soil moisture with area-to-point geographically weighted regression kriging and uncertainty analysis, The 12th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences (Spatial Accuracy 2016), July 5-8, 2016, Montpellier, France.

Wang, J.H., Wu, W., Dai, The Geography of Cultural Ties and Human Mobility: New Evidence based on Social Media from China. Proceeding of 2016 Annual Meeting of the Association of American Geographers (AAG 2016), March 2016, San Francisco, USA.

2015

- Wang, J.H.**, The Geography of Culture Ties and Human Mobility: Big data in Urban Contexts, The 3rd Workshop on Spatial Information Intelligence Services, Dec, 17-18, 2015, Wuhan, China.
- Wu, W., **Wang, J.H.**, Geography of cultural diversity and urban networks: New evidence from location-based social media data in China, International Conference on Location-based Social Media Data, March 2015, Athens, Georgia, USA.
- Wu, W., **Wang, J.H.**, Dai, T.S., Tracking Cultural Ties and Human Mobility through Social Media from China, The 4th International Workshop on Regional, Urban and Spatial Economics in China, June 6-7, 2015, Tsinghua University, Beijing, China. 2015 Young Scholar Nomination Paper Award
- Zheng, S.Q., Xu, Y., Wang, R., Hu, X.K., **Wang, J.H.**, Rail Transit and Neighborhood Consumer Amenities: Evidence from Restaurant Openings in Beijing, AsRES 2015 Annual Conference, July, 6-11, 2015, Washington, DC, USA.
- Zheng, S.Q., Hu, X.K., **Wang, J.H.**, Xu, Y., Wang, R., Rail Transit and Neighborhood Consumer Amenities: Evidence from Restaurant Openings in Beijing. Global Chinese Real Estate Congress 2015 Annual Conference, July, 6-9, 2015, Washington, DC, USA.
- 2014 **Wang, J.H.**, Ge, Y., Zhou, C.H., & Heuvelink, G.B.M., Monitoring Optimization Wireless Sensor Network, Chinese GIS Theory and Method Association 2014 Annual Meeting, Oct. 11, 2014, Xuzhou, China.
- 2009 Wang, L, **Wang, J.H.**, Ma, H et al., The progress in modeling research of urban spheres of influence in China. In Proceedings of the 2009 Fifth International Joint Conference on INC, IMS and IDC, pp. 1344-1347 IEEE Computer Society. <http://doi.ieeecomputersociety.org/10.1109/NCM.2009.393>
- 2007 Wang, H., **Wang, J.H.**, & Liu G.H. Spatial regression analysis on the variation of soil salinity in the Yellow River Delta. In Geoinformatics 2007: Geospatial Information Science, Nanjing, China, SPIE, 2007, pp. 1969-2010. <http://doi.org/10.1117/12.761911>

Paper in Chinese

- 2016 Xu, Y., Zheng, S.Q., **Wang, J.H.**, Urban Vitality: The Demand and Supply of Local Consumption Amenities, *New Architecture*, 164, 26-31.
- 2015
- Liang, Y.Z., Ge, Y., **Wang, J.H.**, Review of Geostatistical-based Downscaling. *Remote Sensing Technology and Application*, 30(1), 1-7. <http://www.rsta.ac.cn/EN/Y2015/V30/I1/1>
- Long, Y., Wu, K., **Wang, J.H.**, Shrinking Citeis in China, *Modern City Research*, 9, 14-19. <http://dx.chinadoi.cn/10.3969/j.issn.1009-6000.2015.09.002>
- 2014 Long, Y., Wu, K., **Wang, J.H.**, Liu, X.J., Big Models: A novel paradigm for urban and regional studies. *Urban Planning Forum*, 6, 52-60. <http://dx.chinadoi.cn/10.3969%2fj.issn.1000-3363.2014.06.008>

- 2012 Ge, Y., **Wang, J.H.**, Wang, J.F., Jin, R., Hu, M.G., Regression Kriging model-based sampling optimization design for the eco-hydrology wireless sensor network. *Advances in Earth Science*, 27(9), 1006-1013. <http://www.adearth.ac.cn/EN/10.11867/j.issn.1001-8166.2012.09.1006>
- 2011 Wang, L., Deng, Y., Liu, S.H., **Wang, J.H.**, The study of urban spheres of influence based on improved field model and its applications: A case study of central China. *Acta Geographica Sinica*, 66(2), 189-198. <http://doi.org/10.11821/xb201102005>
- 2010 **Wang, J.H.** & Ge, Y., Simulation analysis of GCP residuals in the remote sensing image registration. *Remote Sensing Technology and Application*, 26, 226-232. <http://www.rsta.ac.cn/EN/Y2011/V26/I2/226>
- 2009 Deng, Y., Liu, S.H., Zhang, W.T., Wang, L., **Wang, J.H.**, Spatial clustering method based general multidimensional cloud model. *Acta Geographica Sinica*, 64(12), 1439-1447. <http://doi.org/10.11821/xb200912004>

Invited Speeches

International Conference Keynote Speeches

- 2017-06-25 **Wang, J.H.**, Lessons from big data - what can Pedometrics learn, in Pedometrics 2017, 26th June - 1st July, 2017. Wageningen, The Netherlands. <http://www.pedometrics2017.org/wang>

Invited Conference and Workshop Presentation (in English or Chinese)

2018

- 08-21 Urban Sensing and Computing - Big Data Analytic with Open Source Software @ GeoSTAT 2018 Summer School, Prague, Czech Republic
- 06-27 Urban Sensing and Computing - Big Data in Urban Planning and Management @ Symposium on New City, MIT - Zhengzhou New District
- 06-22 City Emergency Events Sensing and Management, Beijing City Lab 2018 Annual Meeting @ The Imperial Ancestral Temple, Beijing

2017

- 12-04 Urban Sensing and Computation @ College of Resources Science & Technology, Beijing Normal University, Beijing, Invited by Prof. Shaomin Liu.
- 11-01 Urban Sensing and Computation @ College of the Environment, Nanjing University, Nanjing, Invited by Prof. Jun Bi.
- 07-28 Pan-spatial URBAN SENSING and Dynamic Mapping, in China Society of Natural Resources 2017 Annual Meeting @ Inner Mongolia Normal University, Huhhot
- 06-22 Pan-spatial Urban Sensing, @ Jiangsu Land and Resources Department
- 06-15 Pan-spatial Urban Sensing, @ Northwest Institute of Eco-Environment and Resources, CAS, Invited by Prof. Xin Li.
- 06-03 Pan-spatial Urban Sensing, Beijing City Lab 2017 Annual Meeting, @ Tsinghua University, Beijing.

- 05-26 Urban Pulse: Pan-spatial Urban Sensing, The 11th Practice Forum of Urban Planning Information @ Shanghai Marriott Hotel Parkview, Invited by DIST(<http://www.dist.com.cn>).
- 05-20 Pan-spatial Dynamic Urban Sensing and Mapping, The 2rd National Workshop on Cartography Theory and Method @ Nanjing University, Nanjing.
- 02-24 Chinese Footprint and Mobility: New Evidence from Geospatial Big Data, @ Shanghai Normal University, Invited by Prof. Jun Gao.
- 01-17 Chinese Footprint and Mobility: New Evidence from Geospatial Big Data, 2016 Annual Meeting of LREIS, CAS @ Beijing.

2016

- 12-01 Chinese Footprint and Mobility: New Evidence from Geospatial Big Data, Workshop on VGI and Tourism Geography. @ Hebei Normal University, Shijiazhuang, Hebei Province, Invited by Prof. Renjie Li.
- 11-08 Urban Spatio-temporal Data Analysis and Visualization, @ Tsinghua University, Beijing. Invited by Prof. Long Ying.
- 09-08 Urban Spatio-temporal Data Mining: Frontier and Application, @ Beijing Institute of Surveying and Mapping, Beijing. Invited by Prof. Liu.
- 06-25 Human Activity, Land Use, and Urban Vitality: Mark the 100th Anniversary of Jane Jacobs, Beijing City Lab 2016 Annual Meeting, @ THUPDI, Beijing.
- 06-14 Spatio-temporal Data Mining: Frontier and Application, @ Institute of Environmental Health and Related Product Safety, Chinese Center for Disease Control and Prevention, Beijing. Invited by Dr. Wang.
- 05-30 Chinese Footprint and Mobility: New Evidence from Social Media Big Data, @ Tsinghua University, Beijing. Invited by Prof. Zheng Siqi.
- 05-28 Spatial Temporal Big Data Analysis and Visualization in R, The 9th China R Conference, @ Renmin University, Beijing.

2015

- 11-04 Chinese Footprint and Mobility: New Evidence from Social Media Big Data, Youth Salon on Spatio-temporal Big Data, @ IGSNRR, CAS, Beijing.
- 10-26 Spatio-temporal Data Mining: Frontier and Application, 100th Anniversary of Hohai University, @ Hohai University, Nanjing.
- 06-08 Social Media Geography: Analysis and Application, Invited by Prof. Yanwei Chai and Prof. Yu Liu @ Peking University, Beijing.
- 06-07 Spatial Temporal Data Analysis and Visualization in R, The 8th China R Conference, @ Peking University, Beijing.
- 06-06 Social Media Geography: Analysis and Application, Beijing City Lab 2015 Annual Meeting @ Beijing Jiaotong University, Beijing.
- 04-15 Social Media Geography: Analysis and Application, Workshop on Big Data and Future Habitation @ Tsinghua University, Beijing.
- 12-25 Space-Time Geostatistical Model-based Monitoring Network Optimization and Space-Time Interpolation, 2015 Annual Meeting of LREIS, CAS @ Beijing.

2014

- 12-19 VGI Urban Geography, 2014 Forum on Urban Internationalization. @ Capital University of Economics and Business, Beijing.
- 06-11 VGI Urban Geography: Case Study in China, Urban Modeling Workshop & 2014 BCL Conference. @ Tsinghua University, Beijing.
- 03-07 Spatial Temporal Data Analysis and Visualization, Invited by Prof. Siqi Zheng, @ Tsinghua University, Beijing.

2013

- 11-18 Spatial Temporal Data Analysis and Visualization, Invited by Prof. Hansheng Wang, @ Peking University, Beijing.
- 09-01 Spatial Temporal Data Analysis and Visualization: An Application in Data Journalism, Hacks Hackers, @ Beijing Maker Space, Beijing.
- 07-28 Spatial Temporal Statistics and Visualization, Data Analysis Salon, @ Renmin University, Beijing.