Hui Kong

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(updated 08/23/2017)

RESEARCH AREAS

- GIS, Spatial Simulation and Modeling, Geodesign, Transportation
- Data Mining, Spatial & Temporal Data Analysis
- Urban Development, Urban Planning, Mixed-use Development

EDUCATION

08/2015 ~ Present	Ph.D. in Geography, Department of Geography, the Ohio State University (OSU) Advisor: Daniel Z. Sui
05/2017 ~07/2017	Visiting Scholar, Shenzhen Key Laboratory of Spatial Smart Sensing and Services, Shenzhen University
08/2013 ~ 05/2015	M.A. in Geography, Department of Geography, the Ohio State University
09/2009 ~ 07/2013	B.S. in Urban and Rural Planning and Resource Management, College of Urban and Environmental Sciences, Peking University (PKU)
09/2009 ~ 07/2013	B.A. in Economics, China Center for Economic Research (CCER), National School of Development, Peking University

WORKING EXPERIENCES

08/2014 ~ Present	Graduate Teaching Assistant, the Ohio State University (Courses: Spatial Simulation and Modeling in GIS, GIS Design & Implementation, Spatial Database for GIS, Transportation of Geography, Transportation Security, Land-use Geography, Human Geography)
05/2015 ~ 08/2015	Assistant Engineer, Zhangzhou City Planning and Design Institute (Internship)
04/2012 ~ 06/2013	Undergraduate Research Assistant, Prof. Xin Tong's Research Group, PKU

SELECTED AWARDS AND HONORS

05/2017	E.Willard and Ruby S. Miller Award, Department of Geography, OSU
05/2016	Fenburr Travel Scholarship for Outstanding Graduate Students, Department of Geography, OSU
08/2013 ~ 07/2014	Graduate University Fellowship, the Ohio State University
06/2013	Excellent Graduate of Colleges and Universities in Beijing, Beijing Education Committee (award for top student)
06/2013	Excellent Graduate of Peking University, Peking University
11/2012	Honor of Pacemaker to Merit Student (Award for top 3% students)
10/2012	Honor of the Distinguished Student, Peking University
10/2010 ~ 10/2012	Zeng Xianzi Scholarship (Award for the top students), Peking University

PUBLICATIONS

Manuscript in progress:

Kong, H., & Sui, D. Z. Understanding and Designing the Bus System in Shenzhen: Accessibility measurement and network design based on bus smart card big data analysis. (in prep)

Jin, S. T., Sui, D. Z., & **Kong, H.** Ridesourcing, the sharing economy, and the future of cities. *Urban Studies*. (in prep)

Kong, H., Sui, D. Z., Jin, S. T., & Tao, Z. Making smart card data 'smarter': Towards a new methodology for boarding records extraction and origin-destination estimation for urban mobility studies and transport planning. *Journal of transport geography.* (under review)

Tao, Z., Yao. Z., **Kong, H.**, Duan, F., & Li, G. Measuring healthcare accessibility using the multi-modal two-step floating catchment area method in Shenzhen, China: estimating travel time via online map APIs. *Health & Place.* (under review)

Gao, Q. L., Li, Q. Q., Yue, Y., Zhuang, Y., Chen, Z. P., & **Kong, H**. Identifying Intra-city Residential Spatial Distribution Changes using Transit Smart Card Data. *Computers, Environment and Urban Systems*. (under review)

Published peer-reviewed papers:

Kong, H., & Sui, D. Z. (2016). Integrating the normative with the positive dimension of the new science for cities: A geodesign-based framework for Cellular Automata modeling. *Environment and Planning B: Planning and Design*, 0265813516651085.

Kong, H., Sui, D. Z., Tong, X., & Wang, X. (2015). Paths to mixed-use development: A case study of Southern Changping in Beijing, China. *Cities,44*, 94-103.

Wang, X., Tong, X. & **Kong, H.** (2013). Occupational Flows and Structural Change: an Empirical Study in Northern Beijing. *Special Zone Economy. (6), 28-32* (In Chinese)

PRESENTATIONS

"Understanding and designing the development of Chinese cities: towards and approach based upon the New Science for Cities", Jul 13, 2017, Harbin Institute of Technology, Shenzhen, China. Invited oral presentation.

"Understanding and designing the development of Chinese cities: towards and approach based upon the New Science for Cities", Jun 7, 2017, Shenzhen University, China. Invited oral presentation.

"From big data to smart city: Data processing and urban function detection based on bus smart card data analysis", 2017 AAG Annual Meeting, Boston, Massachusetts, U.S., oral presentation.

"Integrating the Normative with the Positive Dimension of the New Science for Cities: A Geodesign-based Framework for CA Modeling", 2015 AAG Annual Meeting, Chicago, Illinois, U.S., oral presentation.

"Paths to Mixed-use Development: A Case Study of Southern Changping in Beijing, China", 2014 AAG Annual Meeting, Tampa, Florida, U.S., oral presentation.

RESEARCH PROJECTS

06/2017 ~ Present *Understanding and designing the urban transportation network of Shenzhen based on bus, subway and taxi individual trips*, spatial & temporal data analysis on the bus smart card data, subway smart card data, and taxi pick-up & drop-off records

09/2015~Present *Integrating the Normative with the Positive Dimensions of the New Science for Cities: Establishing an Urban Design Support System for Chinese Cities,* build a bridge between spatial analysis/modeling and urban design, and evoke the application of spatial analysis tools to urban planning process (Ph.D. dissertation project)

12/2015 ~ Present *Understanding and Designing the Bus System in Shenzhen: Accessibility measurement*

	and network design based on bus smart card data analysis, data processing, spatio-temporal data analysis and modeling of the large-volume bus smart card data
02/2014 ~ 12/2015	*Integrating the Normative with the Positive Dimension of the New Science for Cities: A Geodesign-based Framework for CA Modeling*, solve the problem of "un-applicable CA models" by combining Cellular Automata models with the framework of Geodesign
09/2012 ~ 08/2014	*Effectiveness and Mechanism of Mixed-use Development in Chinese Cities: A Case Study of Southern Changping, Beijing*, provide empirical support for the claimed benefits of mixed-use development and tease out the mechanisms behind urban development process, urban form and urban performance
03/2012 ~ 11/2012	*Occupational Flows and Structural Change: an Empirical Study of Labor Forces in Northern Beijing*, supported by Chinese Ministry of Science and Technology
02/2012 ~ 10/2012	*Evaluation of the Industrial Planning of Changping District, Beijing*, cooperated with Changping Government
04/2011 ~ 10/2012	*A Research of Regional Distribution and Forming Mechanism of Dialects in Fujian Province*, supported by President Foundation of Peking University, won the third prize in Undergraduate Research Competition

SKILLS

- Selected Software Skills: ArcGIS, NetLogo, ERDAS, ENVI, GeoDa, SPSS, AutoCAD
- Programming Language: Python, R, Javascript, HTML, CSS
- Other Skills: Fieldwork Study, Questionnaire Survey, In-depth Interview