CURRICULUM VITAE

WENWEN ZHANG
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ACADEMIC APPOINTMENT

Virginia Polytechnic Institute and State University
Assistant Professor of Urban Affairs and Planning 2017 - present

EDUCATION

Georgia Institute of Technology
Ph.D. in City and Regional Planning August 2017
Dissertation: The Interactions between Land Use and Transportation in the Era of Shared Autonomous Vehicle: A Discrete Simulation Model
Committee: Dr. Subhrajit Guhathakurta (Chair), Dr. Steven P. French, Dr. Ram Pendyala, Dr. Richard Fujimoto, Dr. Bistra Dilkina

Master in City & Regional Planning May 2013
M.S. in Civil & Environmental Engineering May 2013
M.S. in Computational Science & Engineering May 2017
Thesis: The Effects of Compact Development on Travel Behavior, Energy Consumption and GHG Emissions: Lessons from Neighborhoods in Phoenix Metropolitan Area
Committee: Dr. Subhrajit Guhathakurta (Chair), Dr. Steven P. French, Dr. Yanzhi Xu

Zhejiang University
B.E. in City & Regional Planning July 2011
Option Paper: Develop Urban Growth Boundary using Cellular Automata Model based on Green Infrastructure Analysis: A Case Study of Chun’an County, China
Advisor: Dr. Yonghua Li

RESEARCH INTERESTS

Innovative Transportation and Land Use Interaction; Sustainable Transportation; Energy Consumption; Urban Simulations; Big & Open Data; Applied Machine Learning in Urban Studies.
PUBLICATIONS

Refereed Journal Articles


Refereed Journal Articles Under Review


Manuscripts Under Preparation


**Zhang, W.**, Hong, A. The Impact of Shared Autonomous Vehicles on Active Travel.


Gupta, K., Zhang, W, Hall, R. Exploring Risks in the Implementation of Smart City Projects in India.

**Book Chapters**


**Peer-Reviewed Conference Proceedings**


French, S., Zhang, W., *The Role of Modeling and Simulation in Creating Resilient Cities,*
Joint Association of European Schools of Planning/Association of Collegiate Schools of Planning Congress, July 15-19, Dublin, Ireland, 2013

AWARDS, HONORS, AND FELLOWSHIPS

Knowledge Discovery and Data Mining (KDD) Conference Best Student Paper Award Runner Up (Applied Data Science Track) 2016
Georgia Planning Association (GPA) Annual Outstanding Student 2013
Best Research Poster in GIS Day Mapping Competition 2013
Second Prize in Chinese Undergraduate Mathematical Modeling Competition 2011
China Nandu Innovation Scholarship($1,200) 2008, 2010
Zhejiang University First Grade Scholarship ($1,000) 2007, 2009, 2011
China’s National Scholarship ($1,500 Granted by China’s Department of Education) 2007

INVITED TALKS

Predicting Fire Risk in Atlanta at Atlanta Fire and Rescue Department. Invitation received from Chief Baker to present to Atlanta Chief Operating Officer Mike Geisler, Commissioner of the Department of Planning and Community Development, Tim Keane. July, 2015
The Implementation of GIS Technology in Urban Transportation Planning at School of Urban Planning and Design (SUPD). Peking University, Shenzhen Campus. June, 2013
Using GIS model builder and Google API to Empower Transit Paper Maps Generation at Metropolitan Atlanta Rapid Transit Authority, Atlanta, GA. May, 2013

CONFERENCE PARTICIPATION

Papers Presented

Zhang, W., Guhathakurta, S. Parking spaces in the age of shared autonomous vehicles: How much parking will we need and where? Annual Transportation Research Board Meeting, January 7-11, Washington D.C. 2017

Zhang, W., Guhathakurta, S. Residential Location Choices in the Era of Shared Autonomous Vehicles. Association of College Schools of Planning (ACSP) 56th Annual Conference, November 3-6, Portland, OR 2016


Zhang, W., Guhathakurta, S., Xu, Y. *The Impact of Compact Development on Travel Behavior, Energy Consumption and GHG Emissions: Lessons Learned from Phoenix Metropolitan Area*. NARSC/RSAI Conference, November 13-16, Atlanta, GA. 2013


**Discussant**


**Moderator**

Safety and Technology Session, Association of College Schools of Planning (ACSP) 54th Annual Conference, October 31 - November 2, Philadelphia, PA. 2014

**CAMPUS TALKS**

**Georgia Institute of Technology**

*Geocoding Using Python and Google API* at College of Design. 2016

*Practitioner’s guide for Data Visualization and Analytics* at College of Computing. 2015

**TEACHING EXPERIENCE**

**Instructor of Record**

Introduction to GIS (3 Credits, Graduate Course) Georgia Tech, Spring 2017

Introduction to GIS (3 Credits, Graduate Course) Georgia Tech, Fall 2016

**RESEARCH EXPERIENCE**

Graduate Research Assistant

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Machine Learning the Impact of Built Environment on Pediatric Asthma Inpatients, PI: Jiemeng Sun, Bistra Dilkina  2015-2016

Spatial Structure of Road Network for City of Madina, PI: John Peponis  2014

Economic Impact of Atlanta Street Car, PI: Subhrajit Guhathakurta  2014

Urban Form and Energy Use Explored Through Dynamic Networked Infrastructure Model (NSF, CMMI#1031690) PI: Subhrajit Guhathakurta  2012-2013

Simulation of the Seismic Performance of Nonstructural Systems (NSF, CMMI#0721399) PI: Steven French  2011-2013

SERVICE TO PROFESSION

Ad hoc reviewer for various Journals, including J. of Planning Education and Research, J. of Cleaner Production, J. of Traffic and Transportation Engineering, Advances in Civil Engineering, Transportation Research Record.

MEDIA COVERAGE

Embracing Analytics: How communities around the country are utilizing data analytics to predict a host of risk factors and reduce fires, Jesse Roman, May 2, National Fire Protection Association (NFPA).  2016

When Computing Equals Social Good, Georgia Tech College of Computing,  2015

RELATED PROFESSIONAL SKILLS

| Urban Modeling | GIS, TransCAD, CUBE, UrbanSim |
| Statistics | R, SPSS, STATA, NLOGIT, Matlab, Mathematica |
| Computer Languages | Python, JavaScipt, CSS, HTML |
| Databases | SQLite, Microsoft Access |
| Design | Photoshop, Rhino, 3D Max, AutoCAD |