

Wei Zhai

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Research Interests: Resilience Planning; Social Vulnerability; Spatial Data Science; GeoAI



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## EDUCATION

**2017-2021(expected):** Ph. D. Degree in Urban and Regional Planning, University of Florida, FL, USA.

- Advisor/Committee Chair: Prof. Zhong-ren Peng
- Committee Members: Dr. Kevin Ash (Geography), Dr. Yan Wang ( Urban Planning), Dr. Damon Woodard (Electrical and Computer Engineering)

**2017-2020:** Master's Degree in Electrical and Computer Engineering, University of Florida, FL, USA.

- GPA:3.9/4.0
- (Courses: Image Processing; Natural Language Processing; Machine Learning; Deep Learning; Pattern Recognition)

**2015-2017:** Master's Degree in Urban Planning, Tsinghua University, Beijing, China. (Excellent Thesis Award)

- Advisor: Prof. Chaolin Gu

**2010-2015:** Bachelor's Degree in Urban Planning, Hunan University, Changsha, China. (With the highest distinction)

- GPA:3.91/4.5 (1st/30)

## JOURNAL PAPERS

- **Zhai, W.,** Peng, Z. R. (2020). Where to buy a house in the United States amid COVID-19? *Environment and Planning A: Economy and Space*, 0308518X20946041. (<https://doi.org/10.1177/0308518X20946041>)
- **Zhai, W.,** Peng, Z. R. (2020). Damage assessment using Google Street View: Evidence from Hurricane Michael in Mexico Beach, Florida. *Applied Geography*. (<https://doi.org/10.1016/j.apgeog.2020.102252>)
- **Zhai, W.,** Liu, M., & Peng, Z. R. (2020). Social distancing and inequality in the United States amid COVID-19 outbreak. *Environment and Planning A: Economy and Space*, 0308518X20932576. (<https://doi.org/10.1177/0308518X20932576>)
- **Zhai, W.,** Peng, Z. R., & Yuan, F. (2020). Examine the effects of neighborhood equity on disaster situational awareness: Harness machine learning and geotagged Twitter data. *International Journal of Disaster Risk Reduction*, 101611. (<https://doi.org/10.1016/j.ijdrr.2020.101611>)
- **Zhai, W.,** Bai, X., Shi, Y., Han, Y., Peng, Z. R., & Gu, C. (2019). Beyond Word2vec: An approach for urban functional region extraction and identification by combining Place2vec and POIs. *Computers, Environment and Urban Systems*, 74, 1-12. (<https://doi.org/10.1016/j.compenvurbsys.2018.11.008>)
- **Zhai, W.,** Bai, X., Peng, Z. R., & Gu, C. (2019). From edit distance to augmented space-time-weighted edit

distance: Detecting and clustering patterns of human activities in Puget Sound region. *Journal of Transport Geography*, 78, 41-55. (<https://doi.org/10.1016/j.jtrangeo.2019.05.003>)

- **Zhai, W.**, Bai, X., Peng, Z. R., & Gu, C. (2019). A bottom-up transportation network efficiency measuring approach: A case study of taxi efficiency in New York City. *Journal of Transport Geography*, 80. 102502. (<https://doi.org/10.1016/j.jtrangeo.2019.102502>)
- Gu, C., Ye, X., Cao, Q., Guan, W., Peng, C., Wu, Y., & **Zhai, W.** (2020). System dynamics modelling of urbanization under energy constraints in China. *Scientific Reports*, 10(1), 1-16. (<https://doi.org/10.1038/s41598-020-66125-3>)

### **MANUSCRIPTS UNDER REVIEW**

- **Zhai, W.**, Bai, X. (2020). Prototypical Resilience Projects for Post-disaster Recovery Planning: From Identification to Implementation. *Journal of Planning Education and Research*. (Under Review)
- **Zhai, W.**, Liu, M., Fu, X., Peng, Z.R. (2020). American Inequality Meets COVID-19: Uneven Spread of the Disease across Communities. *Annals of the American Association of Geographers*. (Under Review)
- Bai, X., **Zhai, W.**, Steiner, R. (2020). Beyond Walking within the Neighborhood—How Have Smart Growth Strategies Affected the Travel Behavior of Older Adults? *Journal of Planning Education and Research*. (Under Review)
- Li, S., **Zhai, W.**, Jiao, J. (2020). Ride hailing comes to grandparents in Austin: where and for whom? *Journal of Planning Education and Research*. (Under Review)
- Yuan, F., Li, M., Liu, R., **Zhai, W.**, Qi, B. (2020). Social Media for Enhanced Understanding of Disaster Resilience during Hurricane Florence. *International Journal of Information Management*. (Under Review)

### **BOOK /BOOK CHAPTER**

- GU, C., Gehard, O., **Zhai, W.**, Feng, G. (2016). Introduction to Human Geography. Science Presse. Beijing, China.

### **BOOK REVIEW**

- **Zhai, W.** (2018). How to Kill a City: Gentrification, Inequality, and the Fight for the Neighborhood, by Peter Moskowitz. *Journal of the American Planning Association*, 84(2), 203-203.

### **TEACHING**

#### **University of Florida, Dept. Urban and Regional Planning, Gainesville, FL**

- Spring 2020 DCP7911 Advanced Design, Construction and Planning Research II Guest Lecture
- Fall 2019 DCP 7794 Doctoral Seminar Guest Lecture
- Spring 2019 URP 6821 Transportation and Land Use Model (4.75/5.0) Co-instructor

#### **Tsinghua University, Dept. Urban Planning, Beijing, China**

- Summer 2016 Introduction to Human Geography. Teaching Assistant

**ACADEMIC AWARDS&SCHOLARSHIP**

- **Excellent Prize** in Urban Design Competition (Awarded by National Steering Committee of Urban and Rural Planning Education), Shen Zhen, China, 2014.
- **Excellent Prize** in Urban Transportation Competition (Awarded by National Steering Committee of Urban and Rural Planning Education), Shen Zhen, China, 2014.
- **First Prize** (top 1.5%) in 11th Excellent Design Exhibition of Hunan Province, 2014.
- **TianAn-ShuiShi Enterprise Scholarship**, 2015.
- **National Scholarship** (top 3%) (Awarded by The Ministry of Education of China), 2014.
- **First Prize Scholarship of Hunan University** (top 10%), 2012.
- **National Scholarship** (top 3%) (Awarded by The Ministry of Education of China), 2011.

**PRESENTATIONS&TALK**

- **Spatial Data Science Symposium 2019 at UCSB, December 2019.** Santa Barbara, CA, USA.
- **UFDCP Doctoral Program Orientation, September 2019.** Publishing as a junior doctoral student. Gainesville, FL, USA.
- **ACSP, October 2019.** Moderator/discussant of the session: Land use and transportation connections. Greenville, SC, USA.
- **ACSP, October 2018.** Measure the local and global commuting efficiency: An exploratory analysis of taxi commuting in New York City. Buffalo, NY, USA.
- **AAG, April 2018.** An approach for urban functional region identification and extraction: Combining Word2vec model and multisource data. New Orleans, LA, USA.

**PROJECT EXPERIENCE**

**Research Project**, University of Florida (2019.09-2020.07), Research Assistant

- Evaluating the effectiveness and funding mechanism of the Downtowner service in Tampa, Florida for statewide application (funded by FDOT).
- Evaluating the connection between transit and TNCs (Transportation Network Companies) in Pinellas County for statewide application (funded by FDOT). Major Participant.

**Research Project**, Tsinghua University (2015.09-2017.05) , Research Assistant

- Interactive Coupling System Model of Urbanization and Ecological Environment in Mega-Cities. (funded by National Natural Science Foundation of China). Major Participant.
- Strategic Research on Global Urbanization and China's Urban System Development. (funded by Ministry of Housing and Urban-Rural Development of China). Major Participant.

**Planning Practice Project**, China Academy of Urban Planning and Design Intern (2014.09-2014.12, 2016.09-2016.12), Planner Internship

- Comprehensive Plan of Wuxi City, Jiangsu Province, 2016.

- Comprehensive Plan of Liupanshui City, Guizhou Province, 2014.
- The Urban-rural Integration Development Planning of Hainan Province, 2014.

**Planning Practice Project**, Architectural Design and Research Institute of Hunan University Intern (2013.06-2013.09), Planner Internship

- Dazehu Conceptual Planning and Design, 2013.
- The Development Conceptual Plan of Hongjiang Ancient Districts, 2013.

**TECHNICAL SKILL**

- Programming Language: Python, R, MATLAB
- Software: Auto CAD 2010, Sketch Up, Photoshop CS4, Arcgis 10.0, Cube, TransCAD