



Yu Han

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1601 Holleman Dr., College Station, TX, 77840

EDUCATION

Ph.D. in Urban and Regional Planning 2016-2020

University of Florida

Dissertation: Agent-based Modeling of Human-Environment Interactions in Coastal Flood Adaptation

MSc. in Electrical and Computer Engineering 2018-2019

University of Florida

MSc. in Civil and Environmental Engineering 2012-2014

Carnegie Mellon University

BSc. in Environmental Engineering 2008-2012

Beijing Institute of Technology

APPOINTMENT

Postdoc in Landscape Architecture&Urban Planning 2021-Now

Texas A&M University at College Station

Postdoc in Department of Earth and Environment 2020-2021

Florida International University

Research Assistant in Urban and Regional Planning 2016-2020

University of Florida

Research Fellow in Institute of Environment 2014-2016

Tsinghua University

PUBLICATIONS

1. Yu Han, Xinyue Ye, et al. Examining the effects of Social and Institutional Barriers on Flood Resilience in Contiguous US in 2009-2019 (In preparation)
2. Yu Han, Xinyue Ye, et al. Synchronizing human-centered urban digital twin for infrastructure resilience: A Research Agenda (In preparation)
3. Yu Han, Liang Mao, Zhong-Ren Peng, Wei Zhai, Xuqi Chen, An agent-based model to simulate human-environment interactions in community flood adaptation. Risk Analysis (Under review)

4. Yu Han, Pallab Mozumder (2021), Risk-based flood adaptation assessment for coastal buildings based on cloud computing. Sustainable Cities and Society, <https://doi.org/10.1016/j.scs.2021.103415>.
5. Yu Han, Pallab Mozumder (2021), Building-level Adaptation Analysis under uncertain Sea-Level Rise. Climate Risk Management, <https://doi.org/10.1016/j.crm.2021.100305>
6. Yu Han, Changjie Chen, Zhong-Ren Peng, Pallab Mozumder (2021), Evaluating impacts of coastal flooding on the transportation system using an activity-based travel demand model: a case study in Miami-Dade County, FL. Transportation, <https://doi.org/10.1007/s10584-020-02802-6>
7. Yu Han, Kevin Ash, Liang Mao, Zhong-Ren Peng (2020). An agent-based model for community flood adaptation under uncertain sea-level rise. Climatic Change, <https://doi.org/10.1007/s10584-020-02802-6>
8. Yu Han, Zhong-Ren Peng (2019). The integration of local government, residents, and insurance in coastal adaptation: An agent-based modeling approach. Computers, Environment and Urban Systems, <https://doi.org/10.1016/j.compenvurbsys.2019.04.001>.
9. Yu Han, Haifeng Jia (2017). Simulating the spatial dynamics of urban growth with an integrated modeling approach: A case study of Foshan, China. Ecological modelling, <https://doi.org/10.1016/j.ecolmodel.2016.04.005>.

PROFESSIONAL REPORTS

1. Zhong-Ren Peng, Yu Han, Life Cycle Costs and Benefits Analysis of Freight Transportation Projects, BDV31 977-119, Florida Department of Transportation(FDOT)

PRESENTATION

- Yu Han. 2020. Probabilistic Assessment of Community Flood Adaptation based on Cost-Benefit Analysis under Sea-Level Rise. virtual SRA 2020 Annual Meeting (https://youtu.be/wmfGi6H2Y_Q).
- Yu Han, Changjie Chen, Ruth L. Steiner, Zhong-Ren Peng. 2021. Evaluating Impacts of Coastal Flooding on the Transportation System Using activity-based modeling: a case study in Miami-Dade County, FL. Proceedings of the Transportation Research Board (TRB) 100th Annual Meeting, Washington, D.C., USA
- Yu Han, Zhong-Ren Peng. 2019. Agent based modeling of individual behavior dynamics on flood disaster risk assessment, A case study in Miami Beach. The 2018 ACSP 58th Annual Conference, Buffalo, New York

- Yu Han, Zhong-Ren Peng. 2019. Evaluating the Accessibility of Highway Network and Community Cost from the Damage of Coastal Storms. Proceedings of the Transportation Research Board (TRB) 98th Annual Meeting, Washington, D.C., USA
- Yu Han, Zhong-Ren Peng. 2018. agent-based modeling of the evolution of attitudes on flooding risk in coastal areas in Miami. The 2017 American Association of Geographers (AAG) annual meeting, New Orleans, Louisiana

DEVELOPED SOFTWARE

- *A land use change simulation system based on multi-criteria evaluation. Copyright Owner: Tsinghua University. Developer: Yu Han, Haifeng Jia, Weize Song, 2015*

TEACHING EXPERIENCE

URP6821: Transportation and Land Use Modeling

Spring 2020

Prof. Dr. Zhong-Ren Peng

Co-taught four-step transportation modeling approaches. Led students to apply transportation-modeling concepts to quantitatively evaluate transportation policies in hands-on lab assignments. Integrated opportunities for hands-on transportation simulation in the modeling software, Cube Voyager.

AWARDS

1. 2020, Urban and regional planning, University of Florida Paul and Malea Zwick Graduate Student Award (\$550)
2. 2019, The Institute of Transportation Engineers, University of Florida Travel Wards (\$700) for the TRB Annual Meeting 2019 in Washington DC
3. 2018, Urban and regional planning, University of Florida Travel Wards (\$200) for the 2018 ACSP 58th Annual Conference, Buffalo, New York
4. 2017, Urban and regional planning, University of Florida Travel Wards (\$400) for the AAG annual meeting, New Orleans, Louisiana
5. 2012-2013, Carnegie Mellon University Graduate Tuition Waiver
6. 2009-2010, Beijing Institute of Technology University Undergraduate Scholarship