

Huihai Wang

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EDUCATION

University of Texas at Austin, Community and Regional Planning Sep. 2021-Present

Degree: Ph.D

Advisor: Professor Junfeng Jiao

Binghamton University, Department of Geography Sep. 2018-Jun. 2021

Degree: Master of Art in Geography

Advisor: Professor Chengbin Deng

Thesis: Development and Application of Sidewalk Anomaly Detection Algorithm Using Mobile Sensors

Wuhan University of Technology, School of Resources and Environmental Engineering Sep. 2013-Jun. 2018

Degree: Bachelor of Science in Geographic Information Science

Overall GPA: 3.5/4.0

RESEARCH INTERESTS

- Location Encoding in Intelligent Transportation System
- Computer Vision in Built Environment Mapping
- Robot Delivery
- GeoAI

RESEARCH EXPERIENCE

Jun.2021 – Present The University of Texas at Austin
Graduate Research Assistant, Urban Information Lab (UIL Lab)

Jun.2019 – May. 2021 Binghamton University
Global Environmental Monitoring and Analytics Lab (GEMA Lab)

Jun.2020 – May.2021 Binghamton University
Johnson City Redevelopment Lab

TEACHING EXPERIENCE

Sep.2022 – Dec.2022 Teaching assistant, Community and Regional Planning, The University of Texas at Austin
Supervisor: Prof. Junfeng Jiao

- CRP 395C Planning Studio

Jan.2022 – May.2022 Teaching assistant, Community and Regional Planning, The University of Texas at Austin
Supervisor: Prof. Patricia Wilson

- CRP 381 Qual/Participatory Methods

Jan.2022 – May.2022 Teaching assistant, Community and Regional Planning, The University of Texas at Austin
Supervisor: Prof. Junfeng Jiao

- CRP 386 Urban Geographic Information System

Aug.2019 – May.2020 Teaching assistant, Department of Geography, Binghamton University
Supervisor: Prof. Chengbin Deng

- GEOG 532/465 Remote Sensing And GIS
- GEOG 536 Land Use Analysis
- GEOG 505 Raster GIS

Aug.2020 - Present Teaching assistant, Department of Geography, Binghamton University
Supervisor: Prof. Mark E. Reisinger

- GEOG 151 World Regional Geography

PUBLICATIONS

Published:

- Jiao, J., & Wang, H. (2023). Forecasting Traffic Speed during Daytime from Google Street View Images using Deep Learning. *Transportation Research Record*, 03611981231169531.
- Jiao, J., Choi, S. J., Wang, H., & Farahi, A. (2023). Evaluating Air Quality Status in Chicago: Application of Street View Imagery and Urban Climate Sensors. *Environmental Modeling & Assessment*, 1-18.
- Jiao, J., & Wang, H. (2022). Traffic behavior recognition from traffic videos under occlusion condition: a Kalman filter approach. *Transportation research record*, 2676(7), 55-65.
- Wang, H. (2021). *Development and Application of Sidewalk Anomaly Detection Algorithm Using Mobile Sensors* (Doctoral dissertation, State University of New York at Binghamton).
- Deng, C., Dong, X., Wang, H., Lin, W., Wen, H., Frazier, J., ... & Holmes, L. (2020). A Data-Driven Framework for Walkability Measurement with Open Data: A Case Study of Triple Cities, New York. *ISPRS International Journal of Geo-Information*, 9(1), 36.

Conferences

- “Forecasting Traffic Speed during Daytime from Google Street View Images using Deep Learning”, Poster Session, AI Applications in Transportation Planning, **the 102nd Annual Meeting of Transportation Research Board**, Washington D.C., USA, Jan 2023.
- “Pedestrian-Cyclist Interaction and Safety Analysis based on Drone Video”, Presentation, Spatial Social Science Topics in Safety, Crime, and Justice, **the American Association of Geographers (AAG) annual meeting 2023**, Virtually, March. 2023.
- “Look to my Lead: How Does a Leash Affect Perceptions of Quadruped Robot?”, Workshops & Tutorials, Social Robot Navigation: Advances and Evaluation, **the 39th IEEE International Conference on Robotics and Automation (ICRA)**, Philadelphia, USA, May 2022.
- “Traffic Behavior Recognition from Traffic Videos under Occlusion Condition: A Kalman Filter Approach”, Poster Session, Information Systems and Technology, **the 101st Annual Meeting of Transportation Research Board**, Washington D.C., USA, Jan 2022.

SCHOLARSHIPS & AWARDS

2019	FIRST PLACE-GRADUATE, Fifth Annual GIS Day Student Poster Competition, Binghamton University
2019	People’s Choice Award, Fifth Annual GIS Day, Student Poster Competition, Binghamton University
2015	Merit Student, Wuhan University of Technology
2015	Second Prize of School Scholarship, Wuhan University of Technology
2014	Bozhulixue Scholarship (First Class), Wuhan University of Technology

SKILLS

- Programming: Python, C++, MATLAB, R
- Robot Operating System (ROS)
- Deep Learning Frameworks: Pytorch, Tensorflow
- Languages: English, Mandarin