

Resume

Jing Wang

City Campus (Lincoln), WHIT 262M

Prem S. Paul Research Center at Whittier School

Phone: (814) 777-8396 Email: jwang96@unl.edu

Academic Background

The University of Nebraska-Lincoln

Ph.D., Civil and Environmental Engineering

Advisor: Dr. Nathan Huynh

The university of South Carolina

Ph.D., Civil and Environmental Engineering, December 2022

Advisor: Dr. Nathan Huynh

The Pennsylvania State University

M.S., Industrial Engineering, December 2018

Advisor: Ling Rothrock

The Shanghai Jiao Tong University

M.S., Aerospace Engineering, June 2015

Advisor: Fuxin Wang

The Northwestern Polytechnical University

B.S., Aerospace Engineering, June 2012

Publication

Wang, Jing and Nathan N. Huynh. “Enhancing Marine Container Terminal Efficiency and Sustainability: A Novel Truck Scheduling Method Using Waiting Lot”, Prepared for Transportation Research Part D: Transport and Environment

Wang, Jing, Gurcan Comert, Negash Begashaw, Nathan N. Huynh, Amara Kouyate, Robert Mullen, Sarah Gassman and Charles Pierce. “A Comparative Analysis of Three Modeling Approaches for Predicting Pavement Conditions” under review by Transportation Research Record

Wang, Jing, Ryan DeVine, Nathan N. Huynh, Weimin Jin, Gurcan Comert and Mashrur Chowdhury. ” Comparison of Models with and without Roadway Features to Estimate Annual Average Daily Traffic at Non-Coverage Locations.” Accepted by International Journal of Transportation Science and Technology

Wang, Jing, Nathan N. Huynh, and Edsel Pena. “Land side truck traffic modeling at container terminals by a stationary two-class queuing strategy with switching.” *Journal of International Logistics and Trade* 20.3 (2022): 118-134.

Tan, Xiaomei, Yiqi Zhang, and **Jing Wang**. “Assessing the potential impacts of connected vehicle systems on driver’s situation awareness and driving performance.” *Transportation research part F: traffic psychology and behaviour* 84 (2022): 177-193.

Wang, Jing, W. Kong, F. Wang, and H. Liu, “Experiment about the influence of surface energy on the growth of icing in supercooled water,” J. Shanghai Jiao Tong Univ., vol. 50, no. 4, pp. 588–594, 2016.

Wang, Jing and Nathan N. Huynh ” [A Novel Truck Scheduling Approach for Reducing Truck Turn Time at Container Terminals via Use of Waiting Lot](#)” Transportation Research Board’s 102nd Annual Meeting

Wang, Jing, Ryan Devine, Nathan N. Huynh, Weimin Jin, Gurcan Comert and Mashrur Chowdhury. “Estimation of Annual Average Daily Traffic at Non-Coverage Locations”, Transportation Research Board’s 102nd Annual Meeting

Wang, Jing, Nathan N. Huynh, and Edsel Pena ” Analysis of a Stationary Two-Class Queuing Strategy with Switching for Marine Container Terminal Application ” Transportation Research Board’s 101nd Annual Meeting

Research Experience

Graduate Research Assistant, University of South Carolina & University of Nebraska-Lincoln
2018 - current

SPR749: Estimating AADT on Non-Coverage Roads

- Developed models to estimate annual average daily traffic (AADT) at non-coverage locations.
- Developed a user-friendly tool that implements the models.
- Improving SCDOT Project Delivery Through Identifying Potentially Suitable Locations
SPR741: Mitigation and Standardizing Section 401/404 Permit Application Process
- Review existing mitigation and conservation assessment models/tools used in the U.S. and use the gathered information to develop GIS-based applications that are implementable by the Environmental Services Office (ESO) to provide a sustainable statewide mitigation program.
- Review existing Section 404 permit application processes and tools used in the U.S. and use the gathered information to develop web-based, interactive applications that are implementable by ESO staff and consultants to streamline the submittal process for Section 404 permit applications submitted to the U.S. Army Corps of Engineers (USACE)

SPR 761: Streamlining Permitting and Mitigation Processes to Improve SCDOT Project Delivery

- Using ArcGIS Survey123connect and related softwares (e.g., Power Automate) to develop 6 apps (e.g., General Permit, Jurisdictional Determination, Pre-Letting Checklist, Project Tracking, Commitment Log, and Inspection forms)
- Developing the dashboard for the compliance forms.

Development, Assessment and Simulation of Enabling Fuels for Naval Decarbonization

- Review existing ship routing and scheduling related papers and other related papers.
- Building the mathematical model to determine the location of on-shore/off-shore stations.
- Implementing solution algorithm to solve this mathematical model.

Graduate Research Assistant, Pennsylvania State University 2015-2018

Degraded Human Cognitive Skills with Automated Cognitive Aids: A study on the Influence of Connected Vehicle Systems on Drivers' Situation Awareness

- Designed the driving simulator to investigate the effects of multiple warning parameters (warning reliability, warning timing) on driver behavior and situation awareness.
- Finished the coding of the design of the experiment with the STISIM simulator.

The Identification of AV Driving Styles Indicators in Human-AV Interaction and HV-AV Interaction

- Assisted with the experimental design including the selection of the related parameter and the specific events.
- Assisted with the coding of the experiment with STISIM simulator.

Graduate Research Assistant, Shanghai Jiao Tong University 2012-2015

Designed and manufactured the test stand to realize the experiment about the impact of substrate on ice growth.

- Used Matlab and C to analyze the influence of thermal diffusivity and contact angle on ice growth through both the theory and experiments.

Skills

Advanced: VB, Excel, Lindo/Solver, Matlab, Python, R

Intermediate: SQL, UG, CATIA, SIMIO

Familiar: SPSS, AutoCAD

Technical Skills :Data Analytics/Visualization, Forecasting, Optimization, Simulation, Predictive Modeling, Statistical Analysis

Honor and awards

| | |
|--|-----------|
| • Merit Student of Northwestern Polytechnical University (NPU)(3 times) | 2009-2011 |
| • 1st Class Outstanding Scholarship of NPU (3 times) | 2009-2011 |
| • 2nd Class Outstanding Scholarship of Shanghai Jiao Tong University (SJTU)(2 times) | 2012-2013 |
| • M. Bert Storey Endowed Graduate Fellowship | 2020-2022 |
