

Curriculum Vitae

Zhenyu Wang, Ph.D.

Center for Urban Transportation Research (CUTR)
University of South Florida
4202 E. Fowler Ave. CUT 100, Tampa, FL 33620
Tel: (813) 974-8998; Email: zwang9@cutr.usf.edu

AREAS OF EXPERTISE

- Transportation Safety
- Crash Modeling and Statistical Analysis
- Traffic Engineering and Operations
- Traffic Signal Systems
- Traffic Simulation
- Intelligent Transportation Systems
- Motorcycle Safety
- Pedestrian and Bicycle Safety
- Naturalistic Behavior Research
- Traffic Incident Management
- Survey Design and Statistical Analysis
- Transportation Data Management
- Transportation Software Development

WORK EXPERIENCE

- 2009 – **Instructor/Adjunct Faculty**
Department of Civil and Environment Engineering, University of South Florida
Duties Assigned: Teach graduate and undergraduate-level courses.
- 2019 – **Senior Research Faculty**
Center for Urban Transportation Research (CUTR), University of South Florida
Duties Assigned: Develop and manage research projects and funding; publish and present research papers; develop and apply technologies to improve safety, traffic operations, and mobility; play active roles in national professional organizations; supervise graduate student research activities.
- 2013 – **Faculty Research Associate**
Center for Urban Transportation Research (CUTR), University of South Florida
Duties Assigned: Develop and manage research projects and funding; publish

and present research papers; develop and apply technologies to improve safety, traffic operations, and mobility; play active roles in national professional organizations; supervise graduate student research activities.

- 2012 – 2013 **Research Specialist**
Center for Urban Transportation Research (CUTR), University of South Florida
Duties Assigned: Developed and managed research projects and funding; published and presented research papers; developed and applied technologies to improve safety, traffic operations, and mobility; supervised graduate student research activities.
- 2008 – 2011 **Postdoctoral Scholar**
University of South Florida
Duties Assigned: Conducted research projects and funding; published and presented research papers; developed transportation software; supervised graduate student research activities
- 2003 – 2008 **Graduate Research Assistant**
University of South Florida
Duties Assigned: Conducted literature reviews and data collection; developed statistical models; published and presented research papers.

EDUCATION

- Ph.D.** Transportation Engineering, University of South Florida (2008)
- M.S.** Transportation Engineering, Chang'an University, China (2003)
- B.S.** Electrical Engineering, Taiyuan University of Technology, China (1996)

TEACHING EXPERIENCE

- Fall 2020 Instructor, “**Computer Application in Transportation Engineering**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Spring 2020 Instructor, “**Transportation Safety**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Spring 2019 Instructor, “**Transportation Safety**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Spring 2018 Instructor, “**Transportation Safety**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Spring 2017 Instructor, “**Transportation Safety**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Fall 2014 Instructor, “**Traffic Flow Theory**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Summer 2014 Instructor, “**Transportation Engineering I**”, Undergraduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Spring 2014 Instructor, “**Transportation Safety**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa

- Fall 2013 Instructor, “**Intelligent Transportation System**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Fall 2013 Instructor, “Intelligent Transportation System”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Fall 2011 Instructor, “**Geotechnical Laboratory**”, Undergraduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Summer 2011 Instructor, “**Data Management in Transportation Engineering**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Spring 2011 Instructor, “**Computer Application in Transportation Engineering**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Fall 2010 Instructor, “**Geotechnical Laboratory**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Spring 2010 Instructor, “**Access Management**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa
- Summer 2009 Instructor, “**Data Management in Transportation Engineering**”, Graduate Level, Civil & Environmental Engineering, University of South Florida, Tampa

GRADUATE STUDENT COMMITTEES

Ahmad Tazay	University of South Florida, 2016	(Ph.D. Dissertation)
Tatok Raharjo	University of South Florida, 2016	(Master’s Thesis)
Shengdi Chen	University of South Florida, 2013	(Ph.D. Dissertation)
Sujan Sikder	University of South Florida, 2013	(Ph.D. Dissertation)
Weiping Deng	University of South Florida, 2013	(Ph.D. Dissertation)
Bing Huang	University of South Florida, 2012	(Ph.D. Dissertation)
Linjun Lu	University of South Florida, 2009	(Ph.D. Dissertation)
Bing Cao	University of South Florida, 2009	(Ph.D. Dissertation)
Chauhan Arjun	University of South Florida, 2010	(Master’s Thesis)
Wang Qing	University of South Florida, 2009	(Master’s Thesis)

MEMBERSHIP

- 2018 – Friend, TRB Visibility Standard Committee (AND40), TRB Highway/Rail Grade Crossings (AHB60), TRB Access Management (AHB 70)
- 2018 – President, International Chinese Transportation Professional Association (ICTPA) Florida Chapter
- 2015 – 2017 Vice President, International Chinese Transportation Professional Association (ICTPA) Florida Chapter.
- 2016 Committee Member, The 11th Asia Pacific Transportation Development Conference and 29th ICTPA Annual Conference, May 27-29, 2016, in Hsinchu, Taiwan.
- 2014 Technical Committee Member, The 10th Asia Pacific Transportation Development Conference and 27th ICTPA Annual Conference, May 25-27, 2014, in Beijing, China.

2013 Technical Committee Member, The 26th ICTPA Annual Conference, May 24-26, 2013, in Tampa, USA.

INVITED REVIEWER FOR PEER-REVIEW JOURNALS

1. Accident Analysis & Prevention
2. Journal of Advanced Transportation
3. Advances in Transportation Studies
4. Journal of Highway and Transportation Research and Development
5. IATSS Research
6. Journal of Transportation Safety & Security
7. Safety Science
8. Scientia Iranica
9. Traffic Injury Prevention
10. Transportation Research Part C
11. Transportation Research Board Annual Meetings (2009 – 2016)
12. Journal of Southeast University
13. Journal of Traffic and Transportation Engineering
14. Journal of Chang'an University (Natural Science Edition)

RESEARCH PROJECTS PERFORMED

- 2021 – 2022 Development of Automated Roadway Lighting Diagnosis Tools for Nighttime Traffic Safety Improvement, Phase II, USDOT (Tier-1) University Transportation Center, \$69,744, **PI**
- 2020 – 2022 Development of Crash Modification Factors for Speed Management of Traffic Signal Progression, Florida Department of Transportation, \$150,319, **Co-PI**
- 2020 – 2021 Railroad Dynamic Envelope Pavement Markings Before-and-After Study for FDOT District 7, FDOT, \$30,000, **PI**
- 2020 – 2021 Understanding Florida Motorcycle Crashes and Injury Outcomes Using the Motorcycle Crash Causation Study (MCCS) Dataset, FDOT, \$109,409, **Co-PI**
- 2019 – 2021 Prioritized Safety Consideration by Work Zone Types and Pilot Implementation, FDOT, \$204,953, **Co-PI**
- 2019 – 2020 Development of Automated Roadway Lighting Diagnosis Tools for Nighttime Traffic Safety Improvement, USDOT (Tier-1) University Transportation Center, \$73,186.65, **PI**
- 2019 – 2020 Development of Low Voltage/Extended Runtime Signalized Intersection Using Backup Power after the Loss of Utility Power Due to Hurricanes, FDOT, \$329,835, **Co-PI**
- 2018 – 2019 Application of Dynamic Crash Prediction Methodologies to FDOT Safety and Transportation System Management and Operational (TSM&O) Programs, FDOT, \$171,646, **PI**

- 2019 Quality Assurance Review of Intersection Lighting Retrofits, FDOT, \$31,310, **Co-PI**
- 2018 – 2019 Pilot Implementation for Preventing Incorrect Turns at Highway-Rail Grade Crossings, FDOT, \$129,771, **Co-PI**
- 2017 – 2019 Integration of a Robust Automated Pedestrian Detection System for Signalized Intersections, FDOT, \$249,467, **Co-PI**
- 2017 – 2018 Street Lighting Measurements on Selected Corridors in FDOT District 7. Phase IV, FDOT D7, \$39,971.88, **Co-PI**
- 2017 – 2018 Understanding Interactions between Drivers and Pedestrian Features at Signalized Intersections, Phase 3, FDOT/FHWA, \$325,460, **Co-PI**
- 2016 – 2017 Florida’s Bicycle/Pedestrian Focused Initiative – Communications, FDOT/NHTSA, \$400,000, **Researcher**
- 2016 – 2017 Understanding Interactions between Drivers and Pedestrian Features at Signalized Intersections, Phase 2, FDOT/FHWA, \$224,811, **Co-PI**
- 2016 – 2017 Development of Statewide Guidelines for Implementing Leading Pedestrian Intervals in Florida, FDOT, \$128,597, **Co-PI**
- 2015 – 2018 NCHRP 03-120 Assessing Interactions between Access Management Treatments and Multimodal Users, TRB, \$800,000, **Co-PI**
- 2015 – 2016 Street Lighting Measurements on Selected Corridors in FDOT District 1, FDOT District 1, \$50,000, **Co-PI**
- 2016 – 2017 Study on Motorcycle Safety in Negotiation with Horizontal Curves in Florida and Development of Crash Modification Factors, FDOT, \$124,791, **PI**
- 2016 – 2016 Optimization of Road Rangers Operations for FDOT District 7 Freeway Systems, FDOT District 7, \$49,250, **Co-PI**
- 2015 – 2016 Florida’s Comprehensive Pedestrian and Bicycle Safety Program, FDOT/NHTSA, \$650,000, **Key Personnel**
- 2014 – 2015 Comprehensive Motorcycle Safety Program, FDOT/NHTSA, \$575,000, **Researcher**
- 2014 – 2015 Pedestrian Program Evaluation and Data Collection, FDOT/NHTSA, \$200,000, **Researcher**
- 2015 – 2015 Understanding Interactions between Drivers and Pedestrian Features at Signalized Intersections, FDOT/FHWA, \$145,551, **Co-PI**
- 2014 – 2015 Comprehensive Pedestrian and Bicycle Safety Program, FDOT/NHTSA, \$695,430, **Key Personnel**
- 2014 – 2015 Development of Effective Truck Route Signing Program for City of Tampa, Transportation Division, City of Tampa, **Co-PI**
- 2014 – 2015 Pilot Study for Preventing Incorrect Turns at Highway–Rail Grade Crossings, FDOT, \$114,081, **Co-PI**
- 2014 Street Lighting Measurements on Selected Corridors in FDOT District 7 Phase III and Phase IV, FDOT District 7, \$99,414, **Co-PI**
- 2013 – 2014 Street Lighting Measurements on Selected Corridors in FDOT District 7 Phase II, FDOT District 7, \$54,991, **Co-PI**

- 2013 – 2014 Community Traffic Safety Support, FDOT/NHTSA, \$150,000, Researcher
- 2013 – 2014 Comprehensive Motorcycle Safety Program, FDOT/NHTSA, \$575,000, Researcher
- 2013 – 2014 Comprehensive Pedestrian Safety Program, FDOT/NHTSA, \$400,000, **Key Personnel**
- 2012 – 2013 Coordinated Pre-Preemption of Traffic Signals to Enhance Railroad Grade Crossing Safety in Urban Areas and Estimation of Train Impacts to Arterial Travel Time Delay, FDOT, \$145,424, **Key Personnel**
- 2012 – 2013 Improved Traffic Control Measures to Prevent Incorrect Turns at Highway-Rail Grade Crossings, FDOT/NCTR, \$99,033.88, **Key Personnel**
- 2012 Assessing the Impact of Proposed Transit Investments and Public Policy Choices on Land Use Patterns (A simulation approach with UrbanSim), FDOT, \$99,947, **Key Personnel**
- 2010 – 2014 Tampa Bay In-Vehicle Driving Behavior Field Study, CUBRC/SHRP2-TRB, National Academies, \$2,453,669, Researcher
- 2012 – 2013 Comprehensive Motorcycle Safety Program, FDOT/NHTSA, \$575,000, **Researcher**
- 2009 Safety Performance Evaluation of Freeway Exit Ramps. STC, \$25,000, **Co-PI**
- 2008 – 2012 Roadway Data Representation and Application Development. FDOT, \$300,000, **Co-PI**
- 2007 Development of an Interface between FDOT's Crash Analysis Reporting System and Safety Analyst. FDOT, **Key Personnel**
- 2006 – 2007 Safety and Operational Performance Evaluation of Two-Lane Exit Ramps with Optional Lane on Florida's Freeways. FDOT, \$150,000, **Key Personnel**
- 2005 – 2006 Integrated Work Zone Safety Management System and Analysis Tools. FDOT, \$150,000, **Key Personnel**
- 2004 Development of a Procedure for Prioritizing Intersections for Improvements Considering Safety and Operational Factors. FDOT, \$130,000, **Key Personnel**
- 2003 Determination of Weaving Length for Vehicles Making U-Turns After Making Right Turns from Driveways. FDOT, \$150,000, Graduate Assistant
- 2003 Right Turn Followed by U-Turn at Median Openings on Four-Lane Arterials as an Alternative to Direct Left Turn from Driveways. FDOT, \$125,000, Graduate Assistant

TRANSPORTATION APPLICATIONS DEVELOPED

FDOT Alert Today and Alive Tomorrow Website (2013-2016)

- *The official website of the Comprehensive Pedestrian Safety Campaign supported by Safety Office, Florida Department of Transportation*
- *<http://www.alerttodayflorida.com>*

Florida Straight-Line Diagrammer (2009-2012)

- *A web-based application to generate Straight-Line Diagrams (SLDs) based on the roadway data dynamically retrieved from the Florida RCI database using a fully automatic and customized approach*

- *Implemented by Statistics Office, Florida Department of Transportation*

Florida SafetyAnalyst Data Converter (2009)

- *A stand-alone application to prepare crash data for implementation of Highway Safety Manual and SafetyAnalyst in Florida*
- *Implemented by Safety Office, Florida Department of Transportation*

Florida Work Zone Crash Database (2007)

- *A web-based application to manage work zone related crash data and provide statistical analysis tool*
- *Implemented by Construction Office, Florida Department of Transportation*

Prioritization of Intersections for Safety and Operational Improvements (2005)

- *A decision support tool to optimize selection of intersection improvement projects considering both safety and operational factors*
- *Implemented by Traffic Engineering and Operations Office, Florida Department of Transportation*

SELECTED PUBLICATIONS

Refereed Journal Publications (* **corresponding author**)

1. Guo, R., Wu Z., Zhang, Y., Lin, P.S. & **Wang, Z.** (2020). Insights from Integrated Geo-Location Data for Pedestrian Crashes, Demographics, and Land Uses. *Journal of the Transportation Research Board*. DOI: 10.1177/0361198120920267
2. Yang, R., **Wang, Z.***, Lin, P-S., Li, X., Chen, Y., Hsu, P., Alex, H. Safety effects of street lighting on roadway segments: development of a crash modification function. *Traffic Injury Prevention*, 2019, 20(3): 1-7. <https://doi.org/10.1080/15389588.2019.1573317>.
3. Xin, C., **Wang, Z*.**, Lee, C., Lin, P., Chen T., Guo R., Lu Q. Development of crash modification factors of horizontal curve design features for single-motorcycle crashes on rural two-lane highways: A matched case-control study. *Accident Analysis & Prevention*, 2019, 123: 51-59. <https://doi.org/10.1016/j.aap.2018.11.008>.
4. Chen, T., Liu, K., **Wang, Z.**, Deng, G., & Chen, B. Vehicle forward collision warning algorithm based on road friction. *Transportation Research Part D: Transport and Environment*, 2019, 66: 49-57. <https://doi.org/10.1016/j.trd.2018.04.017>.
5. He, W., Zhang, Z., Lu, L., **Wang, Z.**, analysis on the influence factors of accident severity: evidence from urban rivercrossing tunnels in Shanghai of China. *Journal of Engineering Science & Technology Review*, 2018, 11(5): 100-108. <https://doi.org/10.25103/jestr.115.12>.
6. Xin, C., Guo, R., **Wang, Z.**, Lu, Q., & Lin, P. S. The effects of neighborhood characteristics and the built environment on pedestrian injury severity: A random parameters generalized ordered probability model with heterogeneity in means and variances. *Analytic Methods in Accident Research*, 2017, 16: 117-132. <https://doi.org/10.1016/j.amar.2017.10.001>.
7. Xin, C., **Wang, Z***, Lin, P., Lee, C., Guo, R. Modeling safety effects of horizontal curve design on injury severity of single-motorcycle crashes with mixed-effects logistic model. *Transportation Research Record*, 2017, 2637: 38-46. <https://doi.org/10.3141/2637-05>.
8. Xin, C., **Wang, Z***, Lin, P., Lee, C., Guo, R. Safety effects of horizontal curve design on motorcycle crash frequency on rural two-lane undivided highways in Florida. *Transportation Research Record*, 2017, 2637: 1-8. <https://doi.org/10.3141/2637-01>.
9. Wei, F., **Wang, Z***, and Lu, J. Exploring factors contributing to lane changes during left-turns on quadruple left-turn lanes at signalized intersections, *Advances in Mechanical*

- Engineering*, 2017, 9(5): 1-9. <https://doi.org/10.1177/1687814017700062>.
10. Wei, F., **Wang, Z***, Lin, P., Hsu, P., Ozkul, S. Jackman, J., and Bato, M. Safety effects of street illuminance at urban signalized intersections in Florida, *Transportation Research Record*, 2016, 2555: 95-102. <https://doi.org/10.3141/2555-13>.
 11. Huang Y., **Wang, Z.** Decentralized adaptive fuzzy control for a class of large-scale MIMO nonlinear systems with strong interconnection and its application to automated highway systems. *Information Sciences*, 2014, 274: 210-224. <https://doi.org/10.1016/j.ins.2014.02.132>.
 12. **Wang, Z***, Huang, B., Lu, J., Zhao, J., and Zhang, Y. exploring the impact of access design on crash injury severity on multi-lane highways, *Traffic Injury Prevention*, Vol. 15(1), pp.102-9, 2014. <https://doi.org/10.1080/15389588.2013.789871>
 13. **Wang, Z***, Zhang, Z., Lu, J., and Zhao, J. Development of a procedure for prioritizing intersection improvement projects considering both safety and operational factors, *Journal of Transportation Safety and Security*, Vol. 4(1), pp.35-48, 2012. <https://doi.org/10.1080/19439962.2011.614374>
 14. Chen, T., Tan, H., Feng, G., **Wang, Z.** Wei, L. APG-TR algorithm of moving vehicle detection, *Journal of Traffic and Transportation Engineering*, Vol. 4, pp. 100-106, 2012. http://en.cnki.com.cn/Article_en/CJFDTOTAL-JYGC201204012.htm
 15. Chen, H., Zhang, Y., **Wang, Z.**, Lu, J.J., and Pontoriero, D. Identifying crash distributions and prone locations by lane groups at freeway diverge areas, *Transportation Research Record*, Vol. 2237, pp88-97, 2011. <https://doi.org/10.3141/2237-10>
 16. **Wang, Z***, Chen, H., and Lu, J. J. Exploring Impacts of Factors Contributing to Injury Severity at Freeway Diverge Areas, *Transportation Research Record*, Vol. 2102, pp.43-52, 2009. <https://doi.org/10.3141/2102-06>
 17. **Wang, Z***, Lu, J. J., and Xiang, Q. Safety and operational impacts of access management techniques, *Advances in Transportation Studies*, Section B 4, Vol. 6, pp. 85-95, 2005. <http://www.atsinternationaljournal.com/index.php/2005-issues/vi-july-2005/358-safety-and-operational-impacts-of-access-management-techniques>
 18. Gao G., **Wang, Z.**, Huang, W. Location selection research of public logistics center based on multi-objective fuzzy decision, *Journal of Highway and Transportation Research and Development*, Vol.21, No.9, 2004. http://en.cnki.com.cn/Article_en/CJFDTOTAL-GLJK200409036.htm
 19. **Wang, Z***, Cui, H., and Huang, W. *Study on system architecture of first-aid system for breakdown vehicle on expressway*, *Journal of Highway and Transportation Research and Development*, Vol.20, No.4, 2003. http://en.cnki.com.cn/Article_en/CJFDTOTAL-GLJK200304028.htm
 20. **Wang, Z***, Gao, G., and Huang, W. Architecture of Expressway Traffic Control System based on Multi-agent, in *Journal of Traffic and Transportation Engineering*, Vol. 3, No.1, pp. 76-92, 2003.
 21. **Wang, Z***, and Huang, W. Research of developing the system architecture for intelligent transportation system in China, *Journal of Southeast University*, Vol. 31, No. 3, pp. 85-89, 2001.

Peer-Reviewed Conference Presentations (* corresponding author)

1. Vasili, A., **Wang, Z***, Lin, P., Guo, R., Yang, R., Wong, E. *Evaluation of a Low-Cost Countermeasure to Prevent Incorrect Turns at Highway-Rail Grade Crossings*. In 99th

- Transportation Research Board Annual Meeting. No. 20-05006. 2020
2. Li, M., Wang, Z*, Lin, P., Yang, R., Vasili, A., Wong, E. *A Machine Learning-based Diagnosis of Lighting Patterns Contributing to Nighttime 1 Crash Severity on Roadway Corridors*. In 99th Transportation Research Board Annual Meeting. No. 20-05641. 2020
 3. Guo, R., Wu Z., Zhang, Y., Lin, P.S. & **Wang, Z.** *Insights from Integrated Geo-Location Data for Pedestrian Crashes, Demographics, and Land Uses*. In 99th Transportation Research Board Annual Meeting. No. 20-00388. 2020
 4. **Wang, Z.***, Williams, K., Butorac, M. Bonneson, J., Schroeder, B., Gluck, J., Kukadia, D, Ozkul, S. *Operational and Safety Impacts of Right-Turn Deceleration Lane for Multimodal Users at Signalized Intersections: A Simulation-Based Study*. In 99th Transportation Research Board Annual Meeting. No. 20-05182. 2020
 5. **Wang, Z.***, Li, M., Yang, R., Lin, P-S., Xin, C., Hsu, P., and Wong, E. *A matched case-control safety study of street lighting uniformity along urban roadway segments*. 98th Transportation Research Board Annual Meeting. No. 19- 03248. 2019
 6. Yang, R., **Wang, Z.***, Lee, C., Lin, P-S., Xin, C. *A mixed logistic study of motorcyclists at fault in two-vehicle crashes on horizontal curves*. 98th Transportation Research Board Annual Meeting. No. 19-03172. 2019
 7. Kolla, R., Rangaswamy, R., **Wang, Z.***, Lee, C., Lin, P-S., Vasili, A., Wong, E. Evaluation of dynamic speed feedback sign to improve motorcycle safety on horizontal curves along rural roads. 98th Transportation Research Board Annual Meeting. No. 19-02814. 2019
 8. Xin, C., **Wang, Z.***, Lin, P-S., Koh, B., Hsu, P., Wong, E., Chen, T., *Exploring the Impacts of Street Illuminance on Nighttime Crash Severity in Roadway Segments Using a Random Parameter Ordered Probit Model*. 97th Transportation Research Board Annual Meeting. No. 18-05718. 2018
 9. Xin, C., **Wang, Z.***, Lee, C., Lin, P. Chen T., Guo R., Lu Q. *A Matched Case-Control Study on Single-Motorcycle Crashes on Rural, 1 Two-Lane, Undivided Horizontal Curves in Florida*. 97th Transportation Research Board Annual Meeting. No. 18-05156. 2018
 10. Lin, P-S., Chen, C., Kourtellis, A., **Wang, Z.**, Guo, R., Zhang, Z. *Investigating driver compliance with pedestrian features at signalized intersections: SHRP2 naturalistic driving study data analysis*. 97th Transportation Research Board Annual Meeting. No. 18-05156. 2018
 11. Lin, P-S., Chen C., **Wang, Z.**, Guo, R. *Assessment of leading pedestrian interval suitability and effectiveness - before-after pilot study in Florida*. 31st Annual Conference of the International Chinese Transportation Professionals Association (ICTPA), Guangzhou, China. No. ICTPA 31-101, 2018
 12. Zhang, G., **Wang, Z.** *Exploring safety impacts of the number and arrangement of lanes on freeway entrance ramps*. 17th COTA International Conference of Transportation Professionals, Shanghai, China. 2017. <https://doi.org/10.1061/9780784480915.462>
 13. **Wang, Z*.**, Lin, P., Chen, Y., Hsu, P., Ozkul, S., Bato, M. *Safety Effects of Street Illuminance on Roadway Segments in Florida*. 96th Transportation Research Board Annual Meeting. No. 17-05438. 2017
 14. Xin, C., **Wang, Z***, Lin, P., Lee, C. *Modeling Random Effects of Horizontal Curve Design on Injury Severity of Single-Motorcycle Crashes Using Mixed-Effects Logistic Model*. 96th Transportation Research Board Annual Meeting. No. 17-05464. 2017
 15. Xin, C., **Wang, Z***, Lin, P., Lee, C., Guo, R. *Safety Effects of Horizontal Curve Design on*

- Motorcycle Crash Frequency on Rural Two-Lane Undivided Highways in Florida*. 96th Transportation Research Board Annual Meeting. No. 17-05501. 2017
16. Ozkul, S., Davis, D., Pinjari, A., **Wang, Z.** Guidance in Logistics Investment Through Logistics Activity Center Development Potential Analysis. 96th Transportation Research Board Annual Meeting. No. 17-06179. 2017
 17. Lin, P-S., **Wang Z.**, Parsafard, M., Li, X., Chandler, C. *Optimization of freeway patrol operations – a comprehensive case study*. 30th Annual Conference of the International Chinese Transportation Professionals Association (ICTPA), May 19-21, 2017, Houston, Texas, USA. 2017
 18. Lin, P., **Wang Z.**, and Guo, R. *Impact of Connected Vehicles and Autonomous Vehicles on Future Transportation*. 11th Asia Pacific Transportation Development Conference & 29th ICTPA Annual Conference, Hsinchu, Taiwan, 2016.
 19. Lin, P., **Wang Z.**, Guo, R., and Kourtellis A. *A Pilot Study on Interactions between Drivers and Pedestrian Features at Signalized Intersections - Using the SHRP2 Naturalistic Driving Study Data*. 11th Asia Pacific Transportation Development Conference & 29th ICTPA Annual Conference, Hsinchu, Taiwan, 2016.
 20. Wei, F., **Wang, Z***, Lin, P., Hsu, P., Ozkul, S. Jackman, J., and Bato, M. *Safety Effects of Street Illuminance at Urban Signalized Intersections in Florida*. 95th Transportation Research Board Annual Meeting. 2016.
 21. Wei F., **Wang, Z***, Qu, Z., Lu, J., and Lin, P. *Study on Lane Changes During Left Turns on Quadruple Left-Turn Lanes at Signalized Intersections in China*, Transportation Research Board 95th Annual Meeting. 2016.
 22. **Wang, Z***, Lee, C., and Lin, P. *Modeling Injury Severity of Single-Motorcycle Crashes on Curved Roadway Segments*. Transportation Research Board 93rd Annual Meeting. No. 14-5123. 2014.
 23. Johnson, M., Fabregas, A., **Wang, Z.**, Katkoori, S., and Lin, P., *Embedded System Design of an Advanced Illumination Measurement System for Highways*. IEEE International Systems Conference, Ottawa, Ontario, Canada, 2014.
 24. Lin, P., **Wang, Z.**, Guo, R., and Wang, Q. *Development of Coordinated Pre-preemption of Traffic Signals to Enhance Railroad At-Grade Crossing Safety and Mobility in Urban Areas*. 10th Asia Pacific Transportation Development Conference & 27th ICTPA Annual Conference, Beijing, China, May 25-27, 2014.
 25. **Wang, Z***, Lin, P., Chen, H., Lu, J., and Deng, W. *Modeling Impacts of Access Design and Spatial Pattern on Crash Risks of Non-motorists on Urban Multilane Highways in Florida*. 92nd Transportation Research Board Annual Meeting, 2013.
 26. **Wang, Z***, Huang, B. and Lu, J.J. *Modeling Impacts of Access Designs on Injury Severity at Midblock Segments of Urban Multilane Highways using Heterogeneous Choice Regression*. 91st Transportation Research Board Annual Meeting, 2012.
 27. **Wang, Z***, Cao, B., Deng, W., Zhang, Z., Lu, J.J. and Chen, H. *Safety Evaluation of Truck- Related Crashes at Freeway Diverge Areas*. 90th Transportation Research Board Annual Meeting, 2011.
 28. Chen, H., **Wang, Z.**, Lu, J.J., and Pontoriero, D. *Identifying Crash Distributions and Prone Locations by Lane Groups at Freeway Diverge Areas*. 90th Transportation Research Board Annual Meeting, 2011.
 29. **Wang, Z***, Chen, H., Zhang, L., Lu, J.J., and Al-Hammadi, A. *Development of*

Procedure for Prioritizing Intersection Improvement Projects Considering Both Safety and Operational Factors. 90th Transportation Research Board Annual Meeting, 2011.

30. **Wang, Z***, Chen, H., and Lu, J. J. *Exploring Impacts of Factors Contributing to Injury Severity at Freeway Diverge Areas*. 88th Transportation Research Board Annual Meeting, 2009.
31. Huang, B., **Wang, Z.**, Lu, J., and Lu, L. *Modeling Speed Profile on Freeway Exit Ramps Using Support Vector Regression*, 12th COTA International Conference of Transportation Professionals Conference, Beijing, China, 2012.
32. **Wang, Z***, Lu, J.J. and Zhang, Z. *Exploring Impacts of Factors Contributing to Injury Severity at Freeway Exit Ramps*. 1st Transportation and Development Institute (TD&I) Congress, 2011.
33. **Wang, Z***, Wang, Q., and Lu, J.J. *Modeling Injury Severity in Work Zones using Ordered Probit Regression*. 10th COTA International Conference of Transportation Professionals Conference, Beijing, China, 2010.
34. **Wang, Z***, Lu, J.J., and Xiang, Q. *Impacts of Access Management Technologies on Traffic Safety*. Conference Proceedings of the International Highway Safety Conference, Beijing, China, 2006.

TECHINICAL REPORTS

1. Pei-Sung Lin, Achilleas Kourtellis, **Zhenyu Wang**, and Cong Chen. *Integration of a Robust Automated Pedestrian Detection System for Signalized Intersections*. Florida Department of Transportation, Tallahassee, Florida, 2019.
2. Butorac, M., Bonneson, J., Connolly, K, Ryus, P., Schroeder, B. (Kittelson & Associates, Inc.), Williams, K., **Wang, Z.**, Ozkul, S. (University of South Florida), Gluck, J. (AECOM, Inc.), *NCHRP Report 900 Guide for the analysis of multimodal corridor access management*, Research Report to National Cooperative Highway Research Program, Transportation Research Board; National Academies of Sciences, Engineering, and Medicine
3. **Wang, Z.**, Lee, C., Lin, P-S., Guo R., Xin, C., Kolla, R., Yang, R., Vasili, A. *Study on motorcycle safety in negotiation with horizontal curves in Florida and development of crash modification factors*. Research Report to the Florida Department of Transportation, University of South Florida, 2018
4. Lin, P-S., **Wang, Z.**, Vasili, A., Schultz, D. *A pilot study for preventing incorrect turns at highway-rail grade crossings*, Research Report to the Florida Department of Transportation, University of South Florida, 2017
5. Lin, P-S., **Wang, Z.**, Li, X., Parsafard, M. *Optimization of Road Rangers operations for FDOT District 7 freeway systems*, Research Report to the Florida Department of Transportation, University of South Florida, 2017
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