

Xiaobing Li

Assistant Professor (January 2026 – Present)

Jackson State University

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EXPERIENCE

- | | |
|---|-------------------|
| • Assistant Professor, Jackson State University, Jackson, MS | 01/2026 – Present |
| • Senior Research Scientist, Kentucky Transportation Center, University of Kentucky | 03/2023-12/2025 |
| • Postdoctoral Research Scholar, Center for Urban Transportation Research, University of South Florida, Tampa, Florida, United States | 07/2021-03/2023 |
| • Postdoctoral Research Associate, Alabama Transportation Institute, The University of Alabama, Tuscaloosa, Alabama, United States | 10/2018-06/2021 |
| • ITS Traffic Engineer (Intern), Tennessee Department of Transportation, Nashville, Tennessee, United States | 6/2018-8/2018 |
| • Graduate Research and Teaching Assistant, The University of Tennessee, Knoxville | 08/2013-12/2017 |
| • Social Director of ITE student chapter, The University of Tennessee, Knoxville | 01/2016-04/2017 |
| • Manufacturing Workshop Planner, Bosch Automotive Diesel Systems Co Ltd, Wuxi, Jiangsu, China | 08/2012-02/2013 |

EDUCATION

- | | | |
|---|---------------------------------|-------------------|
| The University of Tennessee | Knoxville, Tennessee USA | 08/2013 - 05/2018 |
| Ph.D. of Engineering in Civil and Environmental Engineering | | GPA:3.89/4.0 |
| Master of Engineering in Industrial and Systems Engineering | | GPA:3.83/4.0 |
| Jiangnan University | Wuxi, Jiangsu China | 09/2006 - 06/2013 |
| Master of Engineering in the School of Mechanical Engineering | | |
| Bachelor of Engineering in the School of Mechanical Engineering | | |

TEACHING

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|--|-------------------------------------|---------|
| Introduction to Transportation Engineering | Jackson State University, MS | 01/2026 |
| Traffic Engineering | Jackson State University, MS | 01/2026 |

AWARDS / SCHOLARSHIPS

- | | |
|---|---------------|
| Excellent Reviewer Award , Journal of Traffic and Transportation Engineering (English Edition) | 03/2022 |
| 21st Annual Rural Health Conference, The University of Alabama | |
| Judges' Choice Award Faculty Division 1 st Place | 04/2022 |
| TRB Standing Committee on Freeway Operations (ACP20 Freeway OPS) | |
| The 2020 Best TRB Freeway Operations Committee Student Paper Award | 7/3/2020 |
| Tennessee Section Institute of Transportation Engineers (TSITE) | |
| Student Paper Award (Second Place) | 7/26/2018 |
| First-class academic scholarship, Overall GREAT performance scholarship , Jiangnan University, Wuxi, China | 9/2006-6/2013 |

RESEARCH AREAS AND INTERESTS

- ITS in Freight Transportation & Simulation Modeling
- AI/Machine Learning Applications in Traffic Operations & Safety Data
- Motorcycle Injury Prevention
- Active Transport Modes & Public Health
- Spatiotemporal Analysis in Transportation Planning & Safety
- Big Data Analysis in Connected & Automated Vehicles

- Traffic Operations & Incident Management
- Healthcare Operations Research & Systems Optimization
- Cost Management (Cost Modeling & ABCM Software Design)
- Product Management (Design & Quality Control & Statistical Process Control)
- Computer Integrated Manufacturing Systems Engineering (CIMS)

JOURNAL PAPERS

Under Review

- UR1. Zhengfu Qian, Yaqin Qin*, Miao Guo, Xuesong Wang, Pengyan Zhao, and **Xiaobing Li**. “A traffic safety resilience assessment incorporating conflict risk: Application and comparison on two open roads with lateral interferences”. *Transportation Research Board Annual Meeting 2026* (1st round review).
- UR2. Abhay D. Lidbe*, Manish D. Dutta, Michelle Cheshire, Emmanuel Kofi Adanu, **Xiaobing Li**, Praveena Penmetsa, Hee Yun Lee, and Steven Jones. “Exploring the Determinants of Medical Travel Burden using National Household Travel Survey Data”. *Transportation Research Board Annual Meeting 2024 & Transportation Research Record* (1st round review).
- UR3. Subasish Das*, Nazmus Sakib, **Xiaobing Li**, Mohammad Jalayer, Srinivas Geedapally, and Zihang Wei. “Assessing Hit and Run Cases in Pedestrian-Vehicle Collisions using Probabilistic Graphical Method”. *Transportation Research Board Annual Meeting 2024 & Transportation Research Record* (1st round review).
- UR4. Andrew Martin, Jeeyen Koo*, Chris Van Dyke, **Xiaobing Li**, and Jennifer Walton. “Estimation of Weight-Mile Tax Evasion Rates in Oregon”. *Transportation Research Board Annual Meeting 2024 & Transportation Research Record* (1st round review).
- UR5. **Xiaobing Li** and Mouyid Islam*. “Unraveling Driver Behavior: A Comprehensive Analysis of Non-Crash Traffic Violations During the COVID-19 Pandemic in 2020”. *Transportation Research Board & Transportation Research Record* (1st round review).
- UR6. Praveena Penmetsa, Chenxuan Yang, Jun Liu, Timothy Barnett, and **Xiaobing Li**. “Incident Response Personnel and Countermeasures Adoption: Lessons Learned from Focus Group Interviews”. *Transportation Research Board & Transportation Research Record* (1st round review).
- UR7. Siwon Jang*, **Xiaobing Li**, Chanyoung Lee, Savana Wright, and Natalie Rubin. “Relationship Between Motorcyclist Attitudes and Behaviors toward Safe Riding and Self-reported Crash Experiences”. *Transportation Research Board* (1st round review).
- UR8. Weike Lu, Jun Liu*, **Xiaobing Li**, Steven Jones, and Allen Parrish. “Survey of Surveys (SoS) - Mapping the Landscape of Travel-Related Surveys in COVID-19”. *Transportation Research Part A* (1st round review).
- UR9. **Xiaobing Li**, Siwon Jang, Runan Yang, and Chanyoung Lee*. “Understanding Motorcycle Crashes Involving Aging Riders with Different Motorcycle Types including Trikes”. *Journal of Safety Research* (in Revision).
- UR10. Lee, Hee Yun*, Jiyoung Lee, Cho Rong Won, Yan Luo, Young Sun Kim, Sooyong Kim, and **Xiaobing Li**. “Effect of Technology Use on Depressive Symptoms: Does it Vary by Age Groups?”. *American Journal of Health Behavior* (in Revision).
- UR11. Adanu, Emmanuel K., Jun Liu*, Margaret McNamara, Praveena Penmetsa, Abhay Lidbe, **Xiaobing Li**, and Alexander Hainen. “Has Younger People’s Vehicle Dependency Changed Over the Years? – A Comparative Analysis of The Recent National Household Travel Surveys.” *International Journal of Transportation Science and Technology* (in Revision)

Published

- JP1. Mouyid Islam* and **Xiaobing Li**. “Exploring the Motorcycle Crash Risks and Riders’ Risk Profiles: Evidence from the Motorcycle Crash Causation Study”. *IATSS research*, 50(1): 691-700.
<https://doi.org/10.1016/j.iatssr.2025.10.003>
- JP2. Mallory Brown, Andrew Martin*, **Xiaobing Li**, David Leddy, and Jennifer Walton. “Illegal Weigh Station Bypassing”. *Transportation Research Record* 2679 no.1 (2025): 1861-1872.
<https://doi.org/10.1177/03611981241257511>

- JP3. Siwon Jang*, **Xiaobing Li**, Chanyoung Lee, and Savana Wright. “Florida Teen Driver Crash Risk Factors and Injury Severity Before and During COVID-19 Pandemic: An Application of Structural Equation Modeling”. *Transportation Research Part F: Traffic Psychology and Behaviour* 103 (2024): 163-176. <https://doi.org/10.1016/j.trf.2024.04.003>
- JP4. Yaqin Qin*, Ni Yang, Christopher R. Cherry, **Xiaobing Li**, Shilin Zhao, and Yuanyuan Wang. “Effects of emotionally charged advertisements on driver behavior in risky scenarios: A driving simulator study”. *Transportation Research Part F: Traffic Psychology and Behaviour* 101 (2024): 423-436. <https://doi.org/10.1016/j.trf.2024.01.011>
- JP5. Chenxuan Yang, Jun Liu*, **Xiaobing Li**, and Timothy Barnett. “Analysis of First Responder Safety Crashes by Mining News Reports”. *Accident Analysis & Prevention* 192 (2023): 107261. <https://doi.org/10.1016/j.aap.2023.107261>
- JP6. Praveena Penmetsa*, Emmanuel Kofi Adanu, Abhay Lidbe, **Xiaobing Li**, Shashi Nambisan, and Steven Jones. “Relative Safety Assessment for Positioning Children in Vehicles with Varying Levels of Advanced Safety Technologies”. *Future Transportation*, 2023 3(2): 615-625. <https://doi.org/10.3390/futuretransp3020036>
- JP7. Zihe Zhang, Jun Liu*, **Xiaobing Li**, Xing Fu, Chengxuan Yang, and Steven Jones. “Localizing safety performance functions for two-way STOP-controlled (TWST) three-leg intersections on rural two-lane two-way (TLTW) roadways in Alabama: A geospatial modeling approach with clustering analysis”. *Accident Analysis & Prevention* 179 (2023): 106896. <https://doi.org/10.1016/j.aap.2022.106896>
- JP8. Xinwei Lu, Xiaolu Guo, Jingxiao Zhang*, **Xiaobing Li**, Li Li and Steven Jones. “Reducing Traffic Violations in the Online Food Delivery Industry – A Case Study Based on Improving Public Health in Xi’an City, China”. *Frontiers in Public Health* 10 (2022): 3559. <https://doi.org/10.3389/fpubh.2022.974488>
- JP9. Xing Fu, Qifan Nie, **Xiaobing Li**, Jun Liu*, Shashi Nambisan and Steven Jones. “The Role of Built Environment in Emergency Medical Services Delays in Responding to Traffic Crashes.” *Journal of Transportation Engineering, Part A: Systems* 148, no. 10 (2022): 04022085. <https://doi.org/10.1061/JTEPBS.0000726>
- JP10. Qinglin Hu*, **Xiaobing Li**, and Mercedes M. Morales-Alemán. “Pathway Analysis to Characterize the Relationships Between Healthcare Access and Healthcare Visits in the United States using the Health Information National Trends Survey”. *International Journal of Community Medicine and Public Health* 9, no. 5 (2022): 1951-1960. <https://dx.doi.org/10.18203/2394-6040.ijcmph20221206>
- JP11. Yulan Xia, Yaqin Qin, **Xiaobing Li**, and Jiming Xie*. “Risk identification and conflict prediction from videos based on TTC-ML of a multi-lane interweaving area”. *Sustainability* 14, no. 8 (2022): 4620. <https://doi.org/10.3390/su14084620>
- JP12. Laura M. Hopson*, Abhay D. Lidbe, M. Sebrina Jackson, Emmanuel Adanu, **Xiaobing Li**, Praveena Penmetsa, Hee Yun Lee, Autumn Anderson, Charity Obuya, and Gloria Abura-Meerdink. “Transportation to School and Academic Outcomes: A Systematic Review.” *Educational Review* (2022): 1-21. <https://doi.org/10.1080/00131911.2022.2034748>
- JP13. Qinglin Hu*, **Xiaobing Li**, Gregg Bell, and Lea G. Yerby. “The Impacts of Internet and Transportation Access on Patients' Health Conditions: A Cross-Sectional Study”. *International Journal of Community Medicine and Public Health* 9, (2022): 565-574. <http://dx.doi.org/10.18203/2394-6040.ijcmph20220213>
- JP14. **Li, Xiaobing***, Qinglin Hu, and Abbey Gregg. “Analysis and Comparison Between Crash- and Health-based Emergency Medical Service Response Across Alabama”. *Journal of Transport & Health* 24 (2022): 101315. <https://doi.org/10.1016/j.jth.2021.101315>
- JP15. **Li, Xiaobing***, Qinglin Hu, Jun Liu, Shashi Nambisan, Asad Khattak, Abhay Lidbe, and Hee Y. Lee. “Pathway analysis of relationships among community development, active travel behavior, body mass index, and self-rated health.” *International Journal of Sustainable Transportation* 16, no. 4 (2022): 340-356. <https://doi.org/10.1080/15568318.2021.1872123>
- JP16. Hee Yun Lee, Lewis H. Lee, Yan Luo*, Praveena Penmetsa, Emmanuel Kofi Adanu, **Xiaobing Li**, Abhay Lidbe, and Steven Jones. “Anxiety and Depression amongst African-Americans Living in Rural Black Belt Areas of Alabama: Use of Social Determinants of Health Framework.” *The British Journal of Social Work* 52(5), (2022): 2649-2668. <https://doi.org/10.1093/bjsw/bcab199>

- JP17. Bredikhina, Olga A., Sanaa Rafique, Justin W. Fisher, Praveena Penmetsa*, Laurel M. Wheeler, **Xiaobing Li**, and Steven M. Polunsky. "RIDE-HAILING WITH KIDS: WHO'S GOT THEIR BACK?." *Journal of Safety Research* (2021): 117-124. <https://doi.org/10.1016/j.jsr.2021.08.012>
- JP18. Qinglin Hu*, **Xiaobing Li**, Jun Liu, and Emmanuel Kofi Adanu. "A Low-Cost Approach to Identify Hazard Curvature for Local Road Networks Using Open-Source Data." *Transportation Research Interdisciplinary Perspectives* 10 (2021): 100393. <https://doi.org/10.1016/j.trip.2021.100393>
- JP19. **Li, Xiaobing**, Jun Liu*, Chenxuan Yang, and Timothy Barnett. "Bayesian Approach to Developing Context-based Crash Modification Factors for Medians on Rural Four-Lane Roadways." *Transportation Research Record* 2675, no.9 (2021): 03611981211007141. <https://doi.org/10.1177/03611981211007141>
- JP20. Emmanuel Kofi Adanu*, **Xiaobing Li**, Jun Liu, and Steven Jones. "An analysis of the effects of crash factors and pre-crash actions on side impact crashes at unsignalized intersections." *Journal of Advanced Transportation*, vol. 2021, Article ID 6648523, 17 pages, 2021. <https://doi.org/10.1155/2021/6648523>
- JP21. Liu, Jun*, Steven Jones, Emmanuel K. Adanu, and **Xiaobing Li**. "Behavioral pathways in bicycle-motor vehicle crashes: From contributing factors, pre-crash actions, to injury severities." *Journal of Safety Research* 77, (2021): 229-240. <https://doi.org/10.1016/j.jsr.2021.02.015>
- JP22. Zhang, Zihe, Jun Liu*, **Xiaobing Li**, and Asad J. Khattak. "Do Larger Sample Sizes Increase the Reliability of Traffic Incident Duration Models? A Case Study of East Tennessee Incidents." *Transportation Research Record* 2675, no.6 (2021): 0361198121992063. <https://doi.org/10.1177/0361198121992063>
- JP23. **Li, Xiaobing***, Qinglin Hu, Abbey Gregg. "An Integrated Spatio-temporal Analysis of Emergency Medical Service Response Characteristics for Stroke Events Across Alabama." *Journal of Transport & Health* 20 (2021): 101018. <https://doi.org/10.1016/j.jth.2021.101018>
- JP24. **Li, Xiaobing***, Praveena Penmetsa, Jun Liu, Alexander Hainen, and Shashi Nambisan. "Severity of Natural Gas Distribution Pipeline Incidents: Application of An Integrated Spatio-temporal Approach Fused with Text Mining." *Journal of Loss Prevention in the Process Industries* 69 (2020): 104383. <https://doi.org/10.1016/j.jlp.2020.104383>
- JP25. **Li, Xiaobing***, Jun Liu, Zihe Zhang, Allen Parrish, and Steven Jones. "A Spatiotemporal Analysis of Motorcyclist Injury Severity: Findings from 20 Years of Crash Data from Pennsylvania." *Accident Analysis & Prevention* 151 (2020): 105952. <https://doi.org/10.1016/j.aap.2020.105952>
- JP26. Vyas Padmanabhan, Penmetsa, Praveena, **Xiaobing Li***, Fatema Dhondia, Sakina Dhondia, and Allen Parrish. "COVID-19 Effects on Shared-biking in New York, Boston, and Chicago." *Transportation Research Interdisciplinary Perspectives* 9 (2021): 100282. <https://doi.org/10.1016/j.trip.2020.100282>
- JP27. Liu, Jun*, **Xiaobing Li**, and Asad J. Khattak. "An integrated spatio-temporal approach to examine the consequences of driving under the influence (DUI) in crashes." *Accident Analysis & Prevention* 146 (2020): 105742. <https://doi.org/10.1016/j.aap.2020.105742>
- JP28. Lidbe, Abhay*, **Xiaobing Li**, Emmanuel Kofi Adanu, Shashi Nambisan, and Steven Jones. "Exploratory analysis of recent trends in school travel mode choices in the U.S." *Transportation Research Interdisciplinary Perspectives* 6 (2020): 100146. <https://doi.org/10.1016/j.trip.2020.100146>
- JP29. Jun, Liu*, Asad J. Khattak, **Xiaobing Li**, Qifan Nie, and Ziwen Ling. "Bicyclist injury severity in traffic crashes: A spatial approach for geo-referenced crash data to uncover non-stationary correlates." *Journal of Safety Research* 73, no.6 (2020): 25-35. <https://doi.org/10.1016/j.jsr.2020.02.006>
- JP30. Liu, Jun*, Shashi Nambisan, **Xiaobing Li**, and Xing Fu. "Are young Americans carless across the United States? A spatial analysis." *Transportation Research Part D: Transport and Environment* 78 (2020): 102197. <https://doi.org/10.1016/j.trd.2019.11.026>
- JP31. **Li, Xiaobing***, Jun Liu, Asad J. Khattak, and Shashi Nambisan. "Sequential Prediction for Large-Scale Traffic Incident Duration: Application and Comparison of Survival Models." *Transportation Research Record* 2674, no.1 (2020): 79-93. <https://doi.org/10.1177/0361198119899041>
- JP32. Liu, Jun*, Asad J. Khattak, **Xiaobing Li**, and Xing Fu. "A spatial analysis of the ownership of alternative fuel and hybrid vehicles." *Transportation Research Part D: Transport and Environment* 77 (2019): 106-119. <https://doi.org/10.1016/j.trd.2019.10.018>
- JP33. Xu, Jingjing, Behram Wali, **Xiaobing Li***, and Jiaqi Yang. "Injury Severity and Contributing Driver Actions in Passenger Vehicle-Truck Collisions." *International Journal of Environmental Research and*

Public Health 2019, 16(19), 3542. <https://doi.org/10.3390/ijerph16193542>

- JP34. Liu, Jun*, Alexander Hainen, **Xiaobing Li**, Qifan Nie, and Shashi Nambisan. “Pedestrian injury severity in motor vehicle crashes: an integrated spatio-temporal modeling approach.” *Accident Analysis & Prevention* 132 (2019): 105272. <https://doi.org/10.1016/j.aap.2019.105272>
- JP35. Wali, Behram, Asad J. Khattak*, Jim Waters, Deo Chimba, and **Xiaobing Li**. “Development of safety performance functions: incorporating unobserved heterogeneity and functional form analysis.” *Transportation research record* 2672, no. 30 (2018): 9-20. <https://doi.org/10.1177/0361198118767409>
- JP36. **Li, Xiaobing**, Asad J. Khattak*, and Behram Wali. “Role of multiagency response and on-scene times in large-scale traffic incidents.” *Transportation Research Record* 2616, no. 1 (2017): 39-48. <https://doi.org/10.3141/2616-05>
- JP37. Khattak, Asad J*, Jun Liu, Behram Wali, **Xiaobing Li**, and ManWo Ng. “Modeling Traffic Incident Duration Using Quantile Regression.” *Transportation Research Record* 2554, no.1 (2016): 139-148. <https://doi.org/10.3141/2554-15>
- JP38. Ji, Weixi*, **Xiaobing Li**, Jiyong Jia. “Image recognition and Data analysis of ray detection for Titanium alloy pipe fitting welding seam.” *China Mechanical Engineering*, 2013, 24(19): 2597-2601.
- JP39. Ji, Weixi*, **Xiaobing Li**. “Real Time Analysis and Control of Function Quality for High Performance Work Pieces.” *Mechanical Science and Technology for Aerospace Engineering*, 2013, (10): 1428-1432.
- JP40. **Li, Xiaobing**, Weixi Ji*, Jiyong Jia. “ON STOPWATCH METHOD-BASED MAN-HOUR QUOTA CALCULATION PROCESS AND ITS IMPLEMENTATION.” *Computer Applications and Software*, 2013, 30 (4):195-197.

CONFERENCE PAPERS / PROCEEDINGS / REPORTS

- CP1. Qifan Nie, Xing Fu, **Xiaobing Li**, Jun Liu, Guojing Hu, and WeiKe Lu. “Are Uninsured Drivers Less Likely to Request Emergency Medical Services after a Single-Vehicle Crash?” CICTP 2024: 2203-2213, <https://doi.org/10.1061/9780784485484.208>
- CP2. **Li, Xiaobing***, and Asad J. Khattak. “LARGE-SCALE INCIDENT-INDUCED CONGESTION: EN-ROUTE DIVERSIONS OF COMMERCIAL AND NON-COMMERCIAL TRAFFIC UNDER CONNECTED AND AUTOMATED VEHICLES.” In 2018 Winter Simulation Conference (WSC), pp. 1132-1143. IEEE, 2018. <https://doi.org/10.1109/WSC.2018.8632294>
- CP3. Wali, Behram, Asad J. Khattak*, and **Xiaobing Li**. “Exploring Non-Linear Dependencies in Correlates of Roadway Crashes: Application of Generalized Additive & Piecewise Linear Count Data Models”. No. 18-00064. 2018.
- CP4. **Li, Xiaobing***, Asad J. Khattak, and Airtion G. Kohls. "Signal phase timing impact on traffic delay and queue length-an intersection case study." In *Winter Simulation Conference (WSC)*, 2016, pp. 3722-3723. IEEE, 2016. <https://doi.org/10.1109/WSC.2016.7822418>
- CP5. **Li, Xiaobing***, Kaike Zhang, and Zhibo Tan. “Spare part management in a testing workshop.” In 2015 Winter Simulation Conference (WSC), pp. 3170-3171. IEEE, 2015. <https://doi.org/10.1109/WSC.2015.7408454>
- CP6. **Li, Xiaobing***. “Increasing Healthcare System Throughput through Intra-Process Collaboration.” In IIE Annual Conference. Proceedings, p. 225. Institute of Industrial and Systems Engineers (IISE), 2015.

PATENTS & OTHER RESEARCH/PROJECT DOCUMENTS

- PO1. Liu, Jun*, Praveena Penmetsa, **Xiaobing Li**, and Timothy E. Barnett. “Safety Performance of Rural Four-Lane Undivided Roadways and Rural Four-Lane Roadways with a Two-Way Left-Turn Lane”. No. FHWA-GA-21-1915. 2020. http://g92018.eos-intl.net/eLibSQL14_G92018_Documents/19-15.pdf
- PO2. Asad Khattak, **Xiaobing Li**, Sevin Mohammadi, Mohsen Kamrani, Mark Burton, and David Clarke. “FREIGHT FLOWS AND INCIDENT MANAGEMENT.” No. RES 2016-34. 2019. <https://www.tn.gov/content/dam/tn/tdot/long-range-planning/research/final-reports/RES2016-34%20Final%20Report%20Revised%20-%20Approved.pdf>
- PO3. Ji, Weixi, Gaojun Chen, Mingwei Ruan, **Xiaobing Li**. “Large submerged arc welding elbow butt welding device” STATE INTELLECTUAL PROPERTY OFFICE OF P.R.C.
- PO4. Ji, Weixi, **Xiaobing Li**. “A hand-held clamping saddle mounting device” STATE INTELLECTUAL

PROPERTY OFFICE OF P.R.C.

PO5. **Xiaobing Li.** “REDUCING ENERGY USE AND EMISSIONS THROUGH INNOVATIVE TECHNOLOGIES AND COMMUNITY DESIGNS.” Master’s Degree Graduation Project at The University of Tennessee, Knoxville.

PO6. **Xiaobing Li.** “Research and development of Manufacturing Cost Management System for complex products based on ABC method” Graduate graduation project on production cost management at Jiangnan University.

PO7. **Xiaobing Li.** “Research and Development of enterprise document management system - Graduate Research and Innovation Project” May 2011 to December 2012 at Jiangnan University.

PO8. **Xiaobing Li.** “Comprehensive Statistics Processing Error Analysis Based on PowerBuilder” Undergraduate graduation project on pipes quality management at Jiangnan University.

PROFESSIONAL SERVICE & MEMBERSHIPS

- ITE Student Chapter Advisor, Jackson State University, Jackson, Mississippi, January 2026 – Present.
- Member of Institute of Transportation Engineers (International, Southern District, DeepSouth Section), January 2026 – Present
- Paper Review Chair, Standing Committee on Truck and Bus Safety (ACS 60) of the National Academies Transportation Research Board (TRB). July 2024 – Present.
- Member (ID 56576389) of the Intelligent Transportation Society of the Midwest (ITSMIDWEST). August 2023 – Present.
- Member of the Scientific Review Committee for the 9th Road Safety and Simulation (RSS) Conference, Lexington, Kentucky, USA. October 28-31, 2024. <https://rss2024.uky.edu/committees/>
- Member of the Active Transportation Committee, Transportation & Development Institute (T&DI) – ASCE. 04/2023 – present.
<https://www.asce.org/communities/institutes-and-technical-groups/transportation-and-development-institute/committees/transportation-and-development-institute/board-of-governors--t-di/roadway-council/active-transportation-committee>
- Judge for Council of Southern Graduate Schools 2023 *Three Minute Thesis Competition*. 02/2023
- NCHRP Project Panel Member - NCHRP 17-117 *Safety Performance Functions for Horizontal Curves*. 09/2022 – present
<https://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=5346>
- Guest editor for *Sustainability* on a special issue - *Sustainable Transportation for the Future: Automated Vehicles and Big Data on Traffic Operations*. 09/2021 – 02/2023
https://www.mdpi.com/journal/sustainability/special_issues/automated_vehicles_traffic_operations
- Member of the Editorial board of *Sustainability* - MDPI (Multidisciplinary Digital Publishing Institute). 09/2021 – 09/2022
- Member of the Reviewer Team for *American Journal of Traffic and Transportation Engineering*. 09/2020 – present

PAPER/PROJECT REPORT REVIEWS

Reviewed over 327 articles for multiple Journals, Conferences, and Institutes, including but not limited to:

- *Transportation Research Board (ACP20, ACP30, ANB70, AHB15, AT040, ACS10, ACS20, AED10, AED60, ACS40, AED30, AT025, AJE50)*
- *Transportation Research Part C*
- *Accident Analysis and Prevention*
- *Journal of Intelligent Transportation Systems: Technology, Planning, and Operations*
- *Transportation Research Record*
- *Journal of Transportation Safety & Security*
- *Transportmetrica A: Transport Science*
- *Transportmetrica B: Transport Dynamics*
- *Journal of Transport & Health*

- *Journal of Loss Prevention in process industries*
- *Transportation Research Interdisciplinary Perspectives*
- *Case Studies on Transport Policy*
- *Sustainability - MDPI (Multidisciplinary Digital Publishing Institute)*
- *Land - MDPI (Multidisciplinary Digital Publishing Institute)*
- *Mathematics - MDPI (Multidisciplinary Digital Publishing Institute)*
- *Sensors - MDPI (Multidisciplinary Digital Publishing Institute)*
- *Electronics - MDPI (Multidisciplinary Digital Publishing Institute)*
- *Journal of Advanced Transportation*
- *COTA International Conference of Transportation Professionals*
- *American Society of Civil Engineers*
- *IET - Intelligent Transport Systems*
- *PLOS ONE*
- *Production Journal*
- *ScholarOne IEEE Access*
- *Journal of Injury and Violence Research*
- *Advances in Transportation Studies*
- *Cleaner and Responsible Consumption*
- *The 5th International Conference on Computer Science and Application Engineering (CSAE 2021)*
- *Journal of Traffic and Transportation Engineering (English Edition)*
- *INQUIRY*
- *Applied Sciences*
- *Algorithms*
- *Future Transportation*
- *International Journal of Environmental Research and Public Health*
- *STRIDE (Southeastern Transportation Research, Innovation, Development and Education Center)*
- *Machine Learning and Knowledge Extraction – MDPI*
- *Social and Health Sciences*
- *Journal of Safety Research*
- *Advances in Environmental and Engineering Research*
- *Traffic Injury Prevention*
- *Geo-spatial Information Science*
- *Promet – Traffic & Transportation*
- *Scientific Reports – Springer Nature SNAPP*
- *Travel Behaviour and Society*
- *Health Promotion International*
- *Transportation Research Part F: Traffic Psychology and Behaviour*
- *Transportation Safety and Environment*
- *Transportation letters: The International Journal of Transportation Research*

RESEARCH / ENGINEERING EXPERIENCE

Projects

Chameleon Carriers Study. Sponsor: KY Transportation Cabinet, Project # SPR 25-676, \$139,322. Role: Research Assistant.	07/2024-09/2025
ITD Data Quality Analysis and Monitoring. Sponsor: KY Transportation Cabinet, Project # RSF 133, \$150,000. Role: Research Assistant.	10/2022-11/2024
ITS Applications to Improve Work Zone Safety Related to Commercial Vehicles (n/a)	1/2025-09/2026
Missing CMV License Plate Data Identification and Reporting. Sponsor: KY Transportation Cabinet, Project # RSF 147, \$162,746. Role: Research Assistant.	1/2024-3/2026

Evaluation of KYTC's Portable Queue Warning Alert System (PQWAS). Sponsor: KY Transportation Cabinet, Project # FRT 238, \$130,135. Role: Co-PI.	4/2023-6/2024
Enhancement of Kentucky's Truck Parking Information Management Systems (TPIMS). Sponsor: KY Transportation Cabinet, Project # RSF 135, \$125,000. Role: Co-PI.	04/2023-12/2025
Tire Anomaly Classification System (TACS). Sponsor: KY Transportation Cabinet, Project # RSF 98, \$228,000. Role: Research Assistant.	4/2020-9/2024
Evaluation of Kentucky's Driver Focus Camera System. Sponsor: KY Transportation Cabinet, Project # RSF 97, \$60,000. Role: Research Assistant. https://doi.org/10.13023/ktc.rr.2025.10	4/2020-9/2024
Taxonomy and Assessment of Non-crash Traffic Violations. Center for Urban Transportation Research (CUTR) Internal Grant Award Program. Grant No. 90099-1, \$10,000. Role: PI.	11/2022-10/2023
Dynamic Risk Evolution Mechanism and Control Strategy for Tunnel Traffic Operations in Consideration of Spatiotemporal Characteristics. National Natural Science Foundation of China (NSFC). Grant No. 72261021, ¥300,000. Role: Research Assistant.	01/2023-12/2026
A cooperative study on the efficiency and safety of traffic networks flows under the environment of mixed human-driven and connected automated vehicles. Young Scientists Fund, National Natural Science Foundation of China (NSFC). Grant No. 62103292, ¥300,000. Role: Co-PI.	09/2021-08/2024
Pilot Test a Methodology Observation Survey of Motorcycle Personal Protective Equipment. DTNH2217D00040. Sub-contract, \$83,934. Role: Data Collection Lead for Motorcycle PPE Survey Florida Pilot.	05/2022-07/2022
Development of Motorcycle VMT Estimation Method Using a Hybrid Approach. Funder: FDOT, BED25 977-01. \$226,716. Role: Co-PI.	11/2021-04/2023
Improving Moped and Seated Motor Scooter (50 cc or less) Rider Safety. The Behavioral Traffic Safety Cooperative Research Program (BTSCR). PROJECT NO. BTS-19. Phase I - \$184,831.93. Role: Research Support.	12/2021-10/2022
Identifying Countermeasures to Protect Roadside Service and Incident Response Personnel, funded by AAA Foundation for Traffic Safety. \$149,847. Role: Co-PI	3/2020-12/2021
Assessing the Distinct Characteristics between Traffic Crash-Based EMS Services and Health Issue-Based EMS Services and Impacts on Final Outcomes: An Alabama Case Study. Institute for Rural Health Research. Role: Co-PI	08/2019-10/2022
A Cost-Benefit Analysis of Widening of Alabama SR-167: A Macroscopic Study. Grant Number: GR27444, funded by Wiregrass Economic Development Corporation-WEDC. Role: Research Support	10/2019-2/2020
I-10 Mobile River Bridge: A Macroscopic Study of No-Build Implications, Alabama Department of Transportation (ALDOT). Role: Research Support	8/2019-12/2019
Project "Safety Performance of Rural Four-Lane Undivided Roadways and Rural Four-Lane Roadways with a Two-Way Left-Turn Lane", funded by the Georgia Department of Transportation (GDOT). Contract #: RP 19-15, \$99,349. Role: Co-PI.	6/2019-12/2020
Research Assistant for Project "FREIGHT FLOWS AND INCIDENT MANAGEMENT" funded by Tennessee Department of Transportation, RES #: RES2016-34, \$97,731. Role: Research Support	10/2016-5/2018
Research Assistant for Project "Study of Driving Volatility in Connected and Cooperative Vehicle Systems" funded by U.S. National Science Foundation, Award # 1538139, \$399,793. Role: Research Support	8/2015-5/2018
Research Assistant for Project "Highway Safety Manual, Safety Performance Functions (SPF) and Roadway Calibration Factors" funded by Tennessee Department of Transportation, \$321,603.06. Role: Research Support	10/2015-9/2017
Project "Green Generates Green" funded by the Tennessee Department of Transportation, \$163,224. Role: Research Support	10/2015-9/2017

Presentations

Poster presentation “Assessing Hit-and-Run Cases in Pedestrian–Vehicle Collisions Using the Probabilistic Graphical Method” in 103 rd Transportation Research Board Annual Meeting, Washington D.C.	01/2024
Poster presentation “Exploring the Determinants of Medical Travel Burden Using National Household Travel Survey Data” in 103 rd Transportation Research Board Annual Meeting, Washington D.C.	01/2024
Podium presentation “Illegal Weigh Station Bypassing” in 103 rd Transportation Research Board Annual Meeting, Washington D.C.	01/2024
Virtual presentation “Data Driven Motorcycle Safety Analysis for Improved Riding Experience in Modern Society”, ITE Pakistan Meeting	12/2023
Podium presentation “Application of Driver Focus Camera to Detect Violations by Truck Drivers at Weigh Stations” in 2023 ITSMIDWEST Conference & Expo, Indianapolis, IN.	09/2023
Poster presentation “Analysis of First Responder-Involved Traffic Incidents by Mining News Reports” in 102 nd Transportation Research Board Annual Meeting, Washington D.C.	01/2023
Poster presentation “Incident Response Personnel and Countermeasures Adoption: Lessons Learned from Focus Group Interviews” in 102 nd Transportation Research Board Annual Meeting, Washington D.C.	01/2023
Poster presentation “Relationship Between Motorcyclist Attitudes and Behaviors toward Safe Riding and Self-reported Crash Experiences” in 102 nd Transportation Research Board Annual Meeting, Washington D.C.	01/2023
Virtual presentation “Anxiety and Depression among African-Americans Living in Rural Black Belt Areas of Alabama: Use of Social Determinants of Health Framework” in the 9th Annual International Conference on Sustainable Development (ICSD)	09/2021
Virtual presentation “A Systems Approach into Health Pathways from Community Development, Active Travel Behavior to Body Mass Index and Health” in the 2 nd Transportation, Air Quality, and Health Symposium	05/2021
Poster presentation “Survey of Surveys (SoS) - Mapping the Landscape of Travel-Related Surveys in COVID-19” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “A Low-Cost Approach to Identify Hazard Curvature for Local Road Networks Using Open-Source Data” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “Severity of Emergency Natural Gas Distribution Pipeline Incidents: Application of An Integrated Spatio-temporal Approach Fused with Text Mining” in 100 th Transportation Research Board, Washington D.C.	1/2021
Poster presentation “Spatio-temporal Instability in Injury Severity Analysis of Red-light Running Crashes at Signalized Intersections” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “Analysis of Emergency Incidents Regarding Natural Gas Distribution Pipelines” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “A Spatiotemporal Analysis of Motorcyclist Injury Severity: Implications from 20 Years’ Traffic Crashes in Pennsylvania” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “Localized Safety Performance Functions for Rural 3-Leg Stop-Controlled Intersections in Alabama” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “Child Car Seats in TNC Vehicles: What Do State Laws Say?” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “Context-based Crash Modification Factors for Medians on Rural Four-Lane	1/2021

Roadways: A Bayesian Approach” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	
Poster presentation “Analysis and Comparison Between Crash- and Health-based Emergency Medical Service Response Across Alabama” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “The Role of Truckers’ Behaviors in Traffic Crashes: An Integrated Spatio-temporal Injury Severity Analysis” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “An Integrated Spatio-temporal Analysis of Emergency Medical Service Response Characteristics for Stroke Events Across Alabama” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “Do Larger Sample Sizes Increase the Reliability of Traffic Incident Duration Models? A Case Study of East Tennessee Incidents” in 100 th Transportation Research Board Annual Meeting, Washington D.C.	1/2021
Poster presentation “Pathway analysis from community development, active travel behavior, to body mass index, and health” in APHA’s 2020 VIRTUAL Annual Meeting and Expo	10/2020
23 rd COTA Annual Symposium - Young Professionals Lighting Talk “A Mixture of Text Mining and Random Parameter Approach to Understanding Contributing Factors Associated with Incident Responder Safety” in Washington D.C.	1/2020
Poster presentation “Are Uninsured Drivers Less Likely to Request Emergency Medical Services After a Crash?” in 99 th Transportation Research Board Annual Meeting, Washington D.C.	1/2020
Poster presentation “Has the younger population’s vehicle availability changed over the years? – A comparative analysis of the recent National Travel Surveys” in 99 th Transportation Research Board Annual Meeting, Washington D.C.	1/2020
Poster presentation “A Mixture of Text Mining and Random Parameter Approach to Understanding Contributing Factors Associated with Incident Responder Safety” in 99 th Transportation Research Board, Washington D.C.	1/2020
Poster presentation “Sequential Prediction for Large-Scale Traffic Incident Duration: Application and Comparison of Survival Models” in 99 th Transportation Research Board Annual Meeting, Washington D.C.	1/2020
Podium presentation “Why Don’t Occupant Protection Systems Work in Multi-Fatality Traffic Crashes? A Hierarchical Modeling Approach” in 2019 IRF Global R2T Conference & Exhibition, Las Vegas, Nevada.	11/2019
Podium presentation “Who are the early adopters of alternative fuel and hybrid vehicles? Examining the spatially varying vehicle ownership across the United States” in 2019 IRF Global R2T Conference & Exhibition, Las Vegas, Nevada.	11/2019
Podium presentation “The Role of Built Environment in Emergency Medical Services Delays in Responding to Traffic Crashes” in 2019 IRF Global R2T Conference & Exhibition, Las Vegas, Nevada.	11/2019
Podium presentation “Are Uninsured Drivers Less Likely to Request Emergency Medical Services After a Crash?” in 2019 IRF Global R2T Conference & Exhibition, Las Vegas, Nevada.	11/2019
Poster presentation “Pedestrian injury severity in motor vehicle crashes: an integrated spatio-temporal modeling approach” in 98 th Transportation Research Board Annual Meeting, Washington D.C.	1/2019
Poster presentation “Injury Severity and Contributing Driver Actions in Passenger Vehicle–Truck Collisions” in 97 th Transportation Research Board Annual Meeting, Washington D.C.	1/2018
Poster presentation “Development of safety performance functions: incorporating unobserved heterogeneity and functional form analysis” in 97 th Transportation Research Board Annual Meeting, Washington D.C.	1/2018
Poster presentation “Exploring Non-Linear Dependencies in Correlates of Roadway Crashes: Application of Generalized Additive & Piecewise Linear 2 Count Data Models 3” in 97 th	1/2018

Transportation Research Board Annual Meeting, Washington D.C.

Poster presentation “Large-scale traffic incident duration analysis: the role of multi-agency response and on-scene times” in 96th Transportation Research Board Annual Meeting, Washington D.C. 1/2017

Poster presentation “Modeling traffic incident duration using quantile regression” in 95th Transportation Research Board Annual Meeting, Washington D.C. 1/2016

Poster presentation “Signal phase timing impact on traffic delay and queue length-a intersection case study” in 2016 Winter Simulation Conference, Arlington, VA. 12/2016

Poster presentation “Spare part management in a testing workshop” in 2015 Winter Simulation Conference, Huntington Beach, CA. 12/2015

Podium presentation “Increasing Healthcare System Throughput through Intra-process Collaboration” & volunteer work in 2015 IIE Annual Conference & Expo, Nashville TN. 12/2015

Other Teaching Experience

Teaching assistant with Prof. Jun Liu on Roadway Geometric Design class 10-12/2018

Teaching assistant with Prof. Asad Khattak on Intelligent Transportation Systems 08-12/2017

Teaching assistant with Mr. Paul Tucker on AutoCAD Engineering class 1-05/2017

Teaching assistant with Prof. Asad Khattak on Transportation Safety class 8-12/2016

Teaching assistant with Lecturer Jennifer Rutherford on CAD Design Project class 1-05/2016

Teaching assistant with Prof. Christopher Cherry on Geometric Design class 8-12/2015

Successful participation in 2014 UTK International Teaching Assistants’ Seminar and Practicum 1-03/2014

Instructor for physics, mathematics, English, chemistry in Bohan Educational Institution, Wuxi, Jiangsu, China 9/2011-7/2013

Industry/Government

ITS traffic engineer as a summer intern at Tennessee Department of Transportation 6-8/2018

Intelligent Transportation Systems analysis for various ITS projects (message signboards, regional ITS architecture evaluation under CAV); Nashville major corridor HOV lane performance evaluation with a focus on travel speed).

Planner as an intern at Bosch Automotive Diesel Systems Co., Ltd. (RBCD) 8/2011-

Modified device Electric Contact Pin Holder to reduce electric testing errors by 25%; improved work efficiency of Laser Machine by 20%; reduced the cost of MDT Fixed Metal Framework device by 12% by Transforming the localized information sensor on accompanying Fixture with a replaced plastic slice; increased work efficiency and reliability of injectors by 10% by designing a hand-held clamping saddle mounting device. 2/2012

Software Technician at Wuxi Xinfeng Pipe-fittings Co., Ltd 9/2010-

Developed a quality management system to be embedded in Enterprise Information System software; Designed the 3D model of a large welding machine and got a patent for this machine; Improve the pipe quality by developing a software system to process and analyze pipe quality data. 5/2012

AutoCAD technician as a summer intern at Wuxi Turbine Blade Co., Ltd 7-9/2010

3D design of blade products’ parts and assemblies; increased processing speed of massive quality data by 15% by developing a Quality Information Management System Software.

COMPUTER SKILLS / LANGUAGES / CERTIFICATES

Engineering: TransCAD & TransModeler, QGIS & ArcGIS, C/VB/python/PowerBuilder/MATLAB, SQL, AUTOCAD, Solidworks, CATIA, UG & PRO-E, Lingo, Gurobi, Cplex, SUMO.

Statistical: STATA, R, NLOGIT, SPSS, SAS, JMP.

Chinese: Native; **English:** Advanced High.

Certificates:

- U.S. Department of Transportation, Transportation Safety Institute, *Motorcycle Safety: Developing Your*

Program Through Data & Collaboration-Level 1

- Kentucky Transportation Cabinet, 16MKT12 5 _KYTC's TSMO 101, October 08, 2024

SOCIAL / OTHER ACTIVITIES

Member of American Public Health Association	Tuscaloosa, AL	10/2020-10/2021
Chinese Bible study class lecturer, TCCC	Tuscaloosa, AL	2019-Present
Volunteer for the Gatlinburg fire rescue and recovery	Knoxville, TN	1/2017
Social Director of ITE UTK Student Chapter	Knoxville, TN	1/2016-6/2017
Member of the choir at Knoxville Chinese Christian Church	Knoxville, TN	1/2015
Associate Dean of UTK CSSA	Knoxville, TN	8/2014-5/2016
Surveyor of 6σ & process improvement for Vinylex Corporation	Knoxville, TN	10/2014
Vice-minister, West Culture Research & Service Institute	Wuxi, China	9/2007-6/2008
Honeymoon time with my wife and getting ready to fly to the U.S.	Wuxi, China	07/2013 – 08/2013
Looking for jobs in the U.S. under my OPT grace period	Knoxville, TN	08/2018 – 10-2018

MENTORING

Graduate Students

1. Sabit Musa, Department of Civil Engineering, University of Kentucky, 2024
2. Rakesh Rangaswamy, Civil and Environmental Engineering, University of South Florida, 2023
3. Lokesh Kumar Reddy Guduru, COMPUTER SCIENCE AND ENGINEERING, University of South Florida, 2022
4. Abdul Samad Agha, CAS School Of Public Affairs, University of South Florida, 2022
5. Akshay Maratha Jadav, Civil and Environmental Engineering, University of South Florida, 2022
6. Sai Lokesh Reddy Vazrala, School of Information Systems & Management, University of South Florida, 2022

Undergraduate Students:

1. Jonathan Thompson, Jackson State University, Jackson, Mississippi, 2026
2. Zaccheus Capers, Jackson State University, Jackson, Mississippi, 2026