Yiming Xu

School of Architecture, The University of Texas at Austin
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ACADEMIC APPOINTMENTS

The University of Texas at Austin **Sep 2023 - Present**
Postdoctoral Fellow, Community and Regional Planning *Austin, TX*

University of Florida **Aug 2019 - Aug 2023**
Research Assistant, Department of Civil and Coastal Engineering *Gainesville, FL*

University of Massachusetts Lowell **Jun 2018 - Aug 2018**
Research Assistant, Department of Civil and Environmental Engineering *Lowell, MA*

Tongji University **Sep 2016 - Jun 2019**
Research Assistant, School of Transportation Engineering *Shanghai, China*

EDUCATION

University of Florida **Aug 2019 - May 2023**
Ph.D. in Civil Engineering *Gainesville, FL*
Advisor: Dr. Xilei Zhao
Committee members: Dr. Lily Elefteriadou, Dr. Siva Srinivasan, Dr. Daisy Wang
Dissertation: AI-enabled Travel Demand Forecasting for Shared Mobility

Tongji University **Sep 2016 - Jun 2019**
M.S. in Transportation Engineering *Shanghai, China*
Advisor: Dr. Jian Sun
Thesis: An Importance Sampling Approach for High-Risk Scenario Reconstruction and Accelerated Testing of Autonomous Vehicles

Tongji University **Sep 2012 - Jun 2016**
B.S. in Transportation Engineering *Shanghai, China*
Advisor: Dr. Jian Sun

RESEARCH INTERESTS

My primary research interest lies in developing and applying artificial intelligence to enhance the **Sustainability**, **Efficiency**, and **Safety** of urban mobility systems. My work focuses on the following core areas:

- **Methodologies**: Machine Learning, Explainable AI, Foundation Models/LLMs, Spatiotemporal Modeling, Digital Twin, Reinforcement Learning, Knowledge Graphs.
- **Application Areas**: Travel Behavior Modeling, Traffic Safety Analysis, Transportation Planning, Shared Mobility, Electrification of Transport, Autonomous Vehicles, Micromobility, Intelligent Transportation Systems.

RESEARCH EXPERIENCE

Postdoctoral Fellow **Sep 2023 - Present**
School of Architecture, The University of Texas at Austin

- LLM-Driven Travel Behavior Modeling: Retrieval-Augmented Generation for Predicting Trip Dynamics, *2025 - present*
- Infrastructure Planning for Shared Electric Autonomous Vehicles using Deep Reinforcement Learning, *2025 - present*
- Emergency Medical Service Arrival Time Estimation and Route Optimization using Traffic Digital Twin, *2025 - present*
- Agent-SUMO: Integrating SUMO with AI Agents for Interactive Urban Mobility Simulation, *2025 - present*

- Data-Driven Modeling of E-Scooter Demand and Multimodal Interactions with Ridesourcing, *2023 - 2025, Funded by USDOT Tier 1 UTC CM2 and UT Good Systems*
- Advancing Electric Vehicle Safety, Equity, and Infrastructure Planning for Sustainable Urban Mobility, *2024 - 2025, Funded by NSF and UT Good Systems*
- Multilingual AI-Assisted Emergency Preparedness: Enhancing Resilience and Equity in Underserved Communities, *2024 - 2025, Funded by City of Austin*
- Autonomous Vehicle Safety in the Smart City Era, *2024, Funded by UT Good Systems*
- Digital Twin as Catalyst for Sustainable and Smart City, *2023 - 2024, Funded by USDOT Tier 1 UTC CCST*
- Austin Digital Twin: Integrated 3D Modeling and Multi-Layered Data Analysis, *2023 - 2024, Funded by UT Good Systems*
- Navigating LLM Ethics, *2023 - 2024, Funded by NSF and UT Good Systems*

Research Assistant **Aug 2019 - Aug 2023**

Department of Civil and Coastal Engineering, University of Florida

- Shared Micromobility Demand Forecasting with Deep Learning, *2021 - 2023, Funded by USDOT Regional UTC: STRIDE and UF AI Research Catalyst Fund*
- Real-Time Traffic Monitoring Using Transit Buses as Probes, *2023, Funded by USDOT Tier 1 UTC: CETOC*
- Evacuation Behavior Analysis using Large-Scale GPS Data, *2020 - 2022, Funded by NIST*
- Micromobility as a Solution to Reduce Urban Traffic Congestion, *2019 - 2022, Funded by USDOT Regional UTC: STRIDE*
- Interpretable Machine Learning on the Adoption of Ride-splitting, *2019 - 2021, Funded by USDOT Regional UTC: STRIDE*

Research Assistant **Jun 2018 - Aug 2018**

Department of Civil and Environmental Engineering, University of Massachusetts Lowell

- Vehicle Cooperation Around Lane-Changing, *2018*

Research Assistant **Sep 2016 - Jun 2019**

School of Transportation Engineering, Tongji University

- Data-Driven Accelerated Testing Scenario Construction for Autonomous Vehicle Safety Evaluation, *2017 - 2019*
- Vehicle Turning Behavior Modeling at Mixed-Flow Intersections, *2016 - 2018*

PUBLICATIONS

Peer-Reviewed Journal Papers

(**Indicates corresponding author*)

First-Authored and Corresponding-Authored Publications

1. **Xu, Y.***, Ke, Q., Zhang, X., Zhao, X. (2025). ICN: Interactive Convolutional Network for Forecasting Travel Demand of Shared Micromobility. *GeoInformatica*.
2. Chio, S., **Xu, Y.***, Jiao, J. (2025). Utility or Equity? A Critical Analysis of Existing Public Electric Vehicle Charger Allocations in Austin, Texas. *Transportation Research Part D: Transport and Environment*.
3. Xu, N., **Xu, Y.***, Liu, J., Jiao, J. (2025). How Do EV Crashes Differ from ICEV Crashes: A Comparative Study of Pennsylvania. *Journal of Safety Research*.
4. Jiao, J., **Xu, Y.***, Li, Y. (2024). Exploring Spatial Heterogeneity of E-scooter's Relationship with Ridesourcing using Explainable Machine Learning. *Transportation Research Part D: Transport and Environment*.
5. Jiao, J., **Xu, Y.*** (2024). Analyzing Shared E-Scooter Trip Frequency on Urban Road Segments in Austin, TX. *Case Studies on Transport Policy*.
6. **Xu, Y.**, Zhao, X.*, Zhang, X., Paliwal, M. (2023). Real-Time Forecasting of Dockless Scooter-Sharing Demand: A Spatio-Temporal Multi-Graph Transformer Approach. *IEEE Transactions on Intelligent Transportation Systems*.

7. **Xu, Y.**, Zhao, X.*, Lovreglio, R., Kuligowski, E., Nilsson, D., Cova, T. J., Yan, X. (2022). A Highway Vehicle Routing Dataset During the 2019 Kincade Fire Evacuation. *Scientific Data*.
8. **Xu, Y.**, Yan, X., Sisiopiku, V., Merlin, L., Xing, F., Zhao, X.* (2022). Micromobility Trip Origin and Destination Inference Using General Bikeshare Feed Specification Data. *Transportation Research Record*.
9. **Xu, Y.**, Yan, X., Liu, X., Zhao, X.* (2021). Identifying Key Factors Associated with Ridesplitting Adoption Rate and Modeling Their Nonlinear Relationships. *Transportation Research Part A: Policy and Practice*.
10. **Xu, Y.**, Ma, Z., Sun, J.* (2019). Simulation of Turning Vehicles' Behaviors at Mixed-Flow Intersections Based on Potential Field Theory. *Transportmetrica B: Transport Dynamics*.
11. **Xu, Y.**, Zou, Y., Sun, J.* (2018). Accelerated Testing for Automated Vehicles Safety Evaluation in Cut-In Scenarios Based on Importance Sampling, Genetic Algorithm and Simulation Applications. *Journal of Intelligent and Connected Vehicles*.

Co-Authored Publications

1. Wang, H., Davis, W., **Xu, Y.**, Yu, J., Mai, G., Jiao, J.* (2025). Street Semantic Tree: A Knowledge-driven GeoAI Framework for Urban E-scooter Ridership Classification. *International Journal of Geographical Information Science*
2. Jiao, J., Afroogh, S.*, **Xu, Y.**, Phillips, C. (2025). Navigating LLM Ethics: Advancements, Confrontations, and Future Trajectories. *AI and Ethics*.
3. Wang, T., He, C., Li, H., Li, Y., **Xu, Y.**, Wang, Y., Jiao, J. (2025). HLCG: A Hierarchical Lane-Changing Gaming Decision Model for Heterogeneous Traffic Flow on Two-Lane Highways. *Transportation Research Record*
4. Zhang, X., Zhao, X., **Xu, Y.**, Lovreglio, R.*, Nilsson, D. (2024). Situational-Aware Multi-Graph Convolutional Recurrent Network (SA-MGCRN) for Travel Demand Forecasting During Wildfires. *Transportation Research Part A: Policy and Practice*.
5. Zhang, X.*, Zhou, Z., **Xu, Y.**, Zhao, X. (2024). Analyzing Spatial Heterogeneity of Ridesourcing Demand Determinants Using Explainable Machine Learning. *Journal of Transport Geography*.
6. Jiang, S., Sun, Y., Wong, W.*, **Xu, Y.**, Zhao, X. (2024). Real-Time Urban Traffic Monitoring Using Transit Buses as Probes. *Transportation Research Record*.
7. Zhao, X.*, **Xu, Y.**, Lovreglio, R., Kuligowski, E., Nilsson, D., Cova, T. J., Wu, A., Yan, X. (2022). Estimating Wildfire Evacuation Decision and Departure Timing Using Large-Scale GPS Data. *Transportation Research Part D: Transport and Environment*.
8. Wu, A., Yan, X.*, Kuligowski, E., Lovreglio, R., Nilsson, D., Cova, T. J., **Xu, Y.**, Zhao, X. (2022). Wildfire Evacuation Decision Modeling Using GPS Data. *International Journal of Disaster Risk Reduction*
9. Merlin, L.*, Yan, X., **Xu, Y.**, Zhao, X. (2021). A Segment-Level Model of Shared, Electric Scooter Origins and Destinations. *Transportation Research Part D: Transport and Environment*.
10. Qi, X., Ni, Y., **Xu, Y.**, Tian, Y., Wang, J., Sun, J.* (2021). Autonomous Vehicles' Car-Following Drivability Evaluation Based on Driving Behavior Spectrum Reference Model. *Transportation Research Record*.
11. Yan, X., Yang, W., Zhang, X., **Xu, Y.**, Bejleri, I., Zhao, X.* (2021). A Spatiotemporal Analysis of E-Scooters' Relationships with Transit and Station-Based Bikeshare. *Transportation Research Part D: Transport and Environment*.
12. Sun, J.*, Qi, X., **Xu, Y.**, Tian, Y. (2019). Vehicle Turning Behavior Modeling at Conflicting Areas of Mixed-Flow Intersections Based on Deep Learning. *IEEE Transactions on Intelligent Transportation Systems*.
13. Ma, Z., Xie, J., Qi, X., **Xu, Y.**, Sun, J.* (2017). Two-Dimensional Simulation of Turning Behavior in Potential Conflict Area of Mixed-Flow Intersections. *Computer-Aided Civil and Infrastructure Engineering*.

Manuscripts Under Review or Revision

1. **Xu, Y.***, Jiao, J. (2025). Evaluating Retrieval-Augmented Generation Strategies for Large Language Models in Travel Mode Choice Prediction. *Under review. Preprint at arXiv:2508.17527*.
2. **Xu, Y.***, Jiao, J. (2025). Exploring Autonomous Vehicle Crash Severity Using Interpretable Machine Learning and Large Language Models. *Under review*.
3. **Xu, Y.***, Jiao, J., Chen, Y. (2025). An Augmented Dataset of Autonomous Vehicle Collisions in California. *Under review*.

4. **Xu, Y.***, Jiao, J., Wang, H. (2025). From Data to Decisions: An Urban Digital Twin Framework for Sustainable and Proactive Urban Management. *Under review. Preprint at SSRN 4958614.*
5. Wang, H.*, Jiao, J., **Xu, Y.** (2025). Street Function Representation Learning on Long-Term Traffic Flow Prediction. *Under review.*
6. Jiao, J., Park, J., **Xu, Y.***, Sussman, K., Atkinson, L. (2025). SafeMate: A Modular RAG-Based Agent for Context-Aware Emergency Guidance. *Under review. Preprint at arXiv:2505.02306.*

Peer-Reviewed Conference

1. **Xu, Y.**, Jiao, J. (2026). Evaluating Retrieval-Augmented Generation Strategies for Large Language Models in Travel Mode Choice Prediction. *Transportation Research Board 105th Annual Meeting, Washington, D.C. (Accepted)*
2. **Xu, Y.**, Jiao, J., Deng, C. (2026). Analyzing Factors Associated with Autonomous Vehicle Crash Severity Using Interpretable Machine Learning. *Transportation Research Board 105th Annual Meeting, Washington, D.C. (Accepted)*
3. Lewis, S., Jiao, J., **Xu, Y.**, Park, J., Phillips, C. (2026). A Decentralized Digital Twin via Crowdsourced Sensing and Browser-Based Edge Computation. *AAAI 2026 Deployable AI Workshop, Singapore. (Accepted)*
4. **Xu, Y.**, Park, J., Jiao, J. (2025). LLM-Powered Digital Twins for Interactive Urban Mobility Simulation: Integrating SUMO with AI Agents. *NeurIPS 2025 UrbanAI Workshop, San Diego, CA. (Accepted)*
5. Jiao, J., Lewis, S., **Xu, Y.**, Park, J., Phillips, C. (2025). OpenCityCorpus: A Large-Scale, Harmonized, and LLM-Ready Corpus of Urban Data for Scientific Research. *NeurIPS 2025 AI for Science Workshop, San Diego, CA. (Accepted)*
6. Lewis, S., Jiao, J., **Xu, Y.**, Park, J., Phillips, C. (2025). From Walled Gardens to Open Streets: A Pipeline for Cross-City Data Harmonization. *NeurIPS 2025 UrbanAI Workshop, San Diego, CA. (Accepted)*
7. **Xu, Y.**, Jiao, J. (2025). Assessing the Effects of Built Environment and Demographics on E-Scooter and E-Bike Usage on City Streets: A Case Study of Austin, TX. *Transportation Research Board 104th Annual Meeting, Washington, D.C.*
8. **Xu, Y.**, Jiao, J., Wang, H. (2025). An Urban Digital Twin Framework for Sustainable Transportation and Smart Cities: A Case Study of Austin, TX. *Transportation Research Board 104th Annual Meeting, Washington, D.C.*
9. **Xu, Y.**, Jiao, J., Li, Y. (2025). Exploring Spatial Heterogeneity of E-scooter's Relationship with Ridesourcing using Explainable Machine Learning. *Transportation Research Board 104th Annual Meeting, Washington, D.C.*
10. Xu, N., **Xu, Y.**, Liu, J., Jiao, J. (2025). How Do EV Crashes Differ from ICEV Crashes: A Comparative Study of Pennsylvania. *Transportation Research Board 104th Annual Meeting, Washington, D.C.*
11. Wang, H., Jiao, J., **Xu, Y.** (2025). Street Function Representation Learning on Long-Term Traffic Flow Prediction. *Transportation Research Board 104th Annual Meeting, Washington, D.C.*
12. Wang, H., Davis, W., Jiao, J., **Xu, Y.** (2025). Urban E-scooter Usage Prediction Based on Semantic Descriptions: A Knowledge-Driven AI. *Transportation Research Board 104th Annual Meeting, Washington, D.C.*
13. Wang, T., Guo, Q., He, C., Li, H., **Xu, Y.**, Wang, Y., Jiao, J. (2025). Impact of Connected and Automated Vehicles on Longitudinal and Lateral Performance of Heterogeneous Traffic Flow in Shared Autonomy on Two-Lane Highways. *WCX SAE World Congress Experience, Detroit, MI*
14. Chio, S., **Xu, Y.**, Jiao, J. (2024). Utility or Equity? A Critical Analysis of Existing Public Electric Vehicle Charger Allocations in Austin, Texas. *Association of Collegiate Schools of Planning Annual Conference, Seattle, WA*
15. Jiang, S., **Xu, Y.**, Wai, W., Zhao, X. (2024). Real-Time Urban Traffic Monitoring Using Transit Buses as Probes. *Transportation Research Board 103rd Annual Meeting, Washington D.C.*
16. **Xu, Y.**, Ke, Q., Zhao, X. (2023). ICN: Interactive Convolutional Network for Forecasting Travel Demand of Shared Micromobility. *Transportation Research Board 102nd Annual Meeting, Washington, D.C.*

17. **Xu, Y.**, Xiong, R., Lovreglio, R., Nilsson, D., Zhao, X. (2023). Forecasting Real-Time Travel Demand During Wildfire Evacuations: A Situational-Aware Multi-Graph Convolutional Recurrent Network (SA-MGCRN) Approach. *Transportation Research Board 102nd Annual Meeting, Washington, D.C.*
18. **Xu, Y.**, Paliwal, M., Zhao, X. (2022) Real-Time Forecasting of Dockless Scooter-Sharing Demand: A Context-Aware Spatio-Temporal Multi-Graph Convolutional Network Approach. *Transportation Research Board 101st Annual Meeting, Washington, D.C.*
19. Zhao, X., **Xu, Y.**, Lovreglio, R., Kuligowski, E., Nilsson, D., Cova, T. J., Wu, A., Yan, X. (2022) Estimating Wildfire Evacuation Decision and Departure Timing Using Massive GPS Data. *Transportation Research Board 101st Annual Meeting, Washington, D.C.*
20. **Xu, Y.**, Yan, X., Sisiopiku, V., Merlin, L., Xing, F., Zhao, X. (2021). Micromobility Trip Origin and Destination Inference Using General Bikeshare Feed Specification (GBFS) Data. *Transportation Research Board 100th Annual Meeting, Washington, D.C.*
21. Qi, X., Ni, Y., **Xu, Y.**, Tian, Y., Wang, J., Sun, J. (2021). Autonomous Vehicles' Car-Following Drivability Evaluation Based on Driving Behavior Spectrum Reference Model. *Transportation Research Board 100th Annual Meeting, Washington, D.C.*
22. Chen, D., **Xu, Y.**, Sun, J. (2019). Vehicle Cooperation Around Lane-Changing. *Transportation Research Board 98th Annual Meeting, Washington, D.C.*

Patents

1. Sun, J., **Xu, Y.**, Yu, R. A Road-Virtual Parallel Testing Scheme for Autonomous Vehicles. China Patent No.201810417326.2, issued October 2018.
2. Sun, J., **Xu, Y.**, Ye, Y. A Scenario Regeneration and Accelerated Test Method for Autonomous Vehicles. China Patent No.201710568536.7, issued October 2017.

Other Publications

1. Jiao, J., **Xu, Y.** (2024). Scooter-Share Travel Demand Forecast: A Context-Aware LSTM Recurrent Neural Network Approach. Project Report, *USDOT Tier 1 UTC: Cooperative Mobility for Competitive Megaregions.*
2. Jiao, J., **Xu, Y.** (2024). Digital Twin as Catalyst for Sustainable and Smart City. Project Report, *USDOT Tier 1 UTC: Center for Climate-Smart Transportation.*
3. Zhao, X., Sisiopiku, V., Steiner, R., **Xu, Y.**, Liu, Y., Yan, D., Khalil, J., Yang, W., Jafarzadehfadaki, M., Suarez, J. (2022). Micromobility as a Solution To Reduce Urban Traffic Congestion. Project Report, *USDOT Regional UTC: Southeastern Transportation Research, Innovation, Development and Education Center.*
4. **Xu, Y.** (2025). AI in Urban Infrastructure and Utilities. Book Chapter, *Smart Cities with AI. Under Review.*

PRESENTATIONS & TALKS

1. **Xu, Y.** (2025). Urban Digital Twins for Smart Cities. *City of Austin - Digital Twin Partnership in Action Workshop, Austin, TX.*
2. **Xu, Y.** (2025). LLM-Enabled Transportation Digital Twin for Smart Cities. *Smart Cities and AI Symposium, Austin, TX.*
3. **Xu, Y.** (2025). Digital Twins and LLM Agents for Smart Cities. *Good Systems Symposium, Austin, TX.*
4. **Xu, Y.** (2024). A Digital Twin for the City of Austin. *2nd Annual Smart Cities and AI Innovations Symposium, Austin, TX.*
5. **Xu, Y.** (2024). Where There's Fire, There's Smoke. Using AI and Digital Twins to Prepare for Climate Change. *Smart Cities Connect Conference, Austin, TX.*
6. **Xu, Y.** (2023). Real-Time Forecasting of Dockless Scooter-Sharing Demand. *UT Smart Cities Talk Series, Austin, TX.*
7. **Xu, Y.**, Paliwal, M., Zhao, X. (2021). Real-Time Forecasting of Dockless Scooter-Sharing Demand: A Spatio-Temporal Multi-Graph Convolutional Network Approach. *The 2021 TRB Workshop Sponsored by AED50, Washington, DC. & The UF AI Research Catalyst Fund Seminar.*
8. **Xu, Y.**, Yan, X., Liu, X., Zhao, X. (2020). Applying Interpretable Machine Learning to Identify Key Factors Associated with Neighborhood Ride-Splitting Adoption Rate and to Model Their Nonlinear Relationships. *Transportation Research Board ABJ70 Committee meeting, Washington, DC.*

RESEARCH GRANTS

Digital Twins as a Catalyst for Sustainable and Smart Cities **Oct 2023 - Sep 2024**

J. Jiao (PI), ***Y. Xu (co-PI)****, D. Niyogi (co-PI)*

- USDOT Tier 1 University Transportation Center: Center for Climate-Smart Transportation (CCST), **$241,478**

A Highway Vehicle Routing Dataset During the 2019 Kincade Fire Evacuation **Apr 2021 - Oct 2021**

X. Zhao (PI), ***Y. Xu (co-PI)****, R. Lovreglio, E. Kuligowski, D. Nilsson*

- Natural Hazards Center Weather Ready Research Award Program, **$2,500**

TEACHING EXPERIENCE

UGS 302 Ethical AI: Good Systems **Spring 2025**

Guest Lecturer *The University of Texas at Austin*

BDP 319 Introduction to Smart Cities **Spring 2025**

Guest Lecturer *The University of Texas at Austin*

CRP 386 Urban Geographic Information Systems **Fall 2024**

Guest Lecturer *The University of Texas at Austin*

CRP 395D/386 Smart City Practicum **Spring 2024**

Guest Lecturer *The University of Texas at Austin*

LA 329 Global Learning Seminar **Spring 2024**

Guest Lecturer *The University of Texas at Austin*

CGN 6905 Machine Learning Applications in Civil Engineering **Spring 2021**

Teaching Assistant *University of Florida*

MENTORING EXPERIENCE

Ross Burgett **Fall 2025 - Present**

M.S. Student, School of Architecture *The University of Texas at Austin*

Jihyung Park **Spring 2025 - Present**

M.S. Student, Department of Computer Science *The University of Texas at Austin*

Zhewei Xie **Spring 2025 - Fall 2025**

M.S. Student, Department of Economics *The University of Texas at Austin*

Tianyi Wang **Summer 2024 - Summer 2025**

M.S. Student, Department of Mechanical Engineering and Materials Science *Yale University*

Claire Deng **Fall 2024 - Summer 2025**

High School Student *Westwood High School*

Yu Chen **Fall 2024 - Summer 2025**

M.S. Student, School of Architecture *The University of Texas at Austin*

Aaron Purewal **Fall 2023 - Spring 2024**

B.S. Student, McCombs School of Business *The University of Texas at Austin*

Xiaohe Yin **Fall 2023 - Spring 2024**

Research Assistant, Tandon School of Engineering *New York University*

Kay Kong **Fall 2023 - Spring 2024**

B.S. Student, Department of Computer Science *The University of Texas at Austin*

Jakob Love **Fall 2023 - Spring 2024**

B.S. Student, Department of Aerospace Engineering and Engineering Mechanics *The University of Texas at Austin*

Ruoyang Xiong **Fall 2021 - Fall 2022**

M.S. Student, Department of Computer and Information Science and Engineering *University of Florida*

Yepeng Liu **Fall 2020 - Fall 2021**

M.S. Student, Department of Computer and Information Science and Engineering *University of Florida*

Mudit Paliwal **Spring 2020 - Spring 2021**
M.S. Student, Department of Industrial and Systems Engineering *University of Florida*
Alex Wu **Spring 2020 - Fall 2021**
B.S. Student, Department of Civil and Coastal Engineering *University of Florida*

SERVICE AND PROFESSIONAL AFFILIATIONS

Journal Reviewer

- Accident Analysis and Prevention
- Applied Geography
- Case Studies on Transport Policy
- Cities
- Computers & Graphics
- Computers, Environment and Urban Systems
- Humanities and Social Sciences Communications
- Journal of Cycling and Micromobility Research
- Journal of Intelligent Transportation Systems: Technology, Planning, and Operations
- Journal of Transport Geography
- Multimodal Transportation
- PeerJ Computer Science
- Research in Transportation Economics
- Transport Policy
- Transport Reviews
- Transportmetrica A: Transport Science
- Transportation Research Interdisciplinary Perspectives
- Transportation Research Part A: Policy and Practice
- Transportation Research Part C: Emerging Technologies
- Transportation Research Part D: Transport and Environment
- Transportation Research Record
- Travel Behaviour and Society

Conference Reviewer

- COTA International Conference of Transportation Professionals
- IEEE Intelligent Vehicles Symposium
- International Association for China Planning (IACP) Conference
- Transportation Research Board Annual Meeting

Member

- Association of Collegiate Schools of Planning (ACSP)
- American Association of Geographers (AAG)
- Chinese Overseas Transportation Association (COTA)
- World Transportation Convention (WTC) GH0401 Technical Committee

HONORS & AWARDS

- Top 10 Most Cited Articles, in *Transportation Research Part A: Policy and Practice*, 2021 - Present
- Transportation Research Board Annual Meeting Travel Award, *University of Florida*, 2020, 2021, 2022, and 2023
- Graduate Academic Scholarship, *Tongji University*, 2016, 2017, and 2018
- Bachelor's Academic Outstanding Scholarship, *Tongji University*, 2013

ADDITIONAL PROFESSIONAL EXPERIENCE

DiDi Labs, Research Intern *Mountain View, CA, Sep 2022 - Dec 2022*

- Developed a motion prediction model incorporating GCN, VAE, and attention operations.
- Evaluated the proposed model using Waymo Open Dataset. The proposed model achieved **13% improvement** in predicting accuracy and 70% improvement in trajectory diversity compared with the baseline (i.e., Multipath++ model).

AREAS OF TEACHING INTEREST

- Transportation Engineering
- Transportation Planning
- Machine Learning
- Big Data Analytics
- Intelligent Transportation Systems
- Smart Cities

REFERENCES

Junfeng Jiao, Ph.D.
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The University of Texas at Austin
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(Ph.D. dissertation committee member)