

Xiang ‘Jacob’ Yan

EDUCATION

University of Michigan, Ann Arbor, Michigan

- Ph.D. in Urban and Regional Planning (Transportation Technology & Geospatial Analytics) 2019
- Master’s in Urban Planning (Housing, Community, and Economic Development) 2015

University of Florida, Gainesville, Florida

- M.S. in Civil Engineering (Transportation Engineering) 2021

Nanjing University, Nanjing, China

- B.E. in Urban Planning (Economic Geography) 2013

EMPLOYMENT

Assistant Professor, Civil & Coastal Engineering, University of Florida 2022 -

Research Assistant Professor, Civil & Coastal Engineering, University of Florida 2021 - 2022

Postdoctoral Associate, Urban and Regional Planning, University of Florida 2019 - 2020

Graduate Student Research Assistant, Urban & Regional Planning, Univ. of Michigan 2015 - 2019

GIS Analyst, School for Environment & Sustainability, University of Michigan 2014 - 2015

Data Analyst, Department of Institutional Research, Washtenaw Community College 2014

Instructor, Nanjing New Oriental School, China 2012 - 2013

AWARDS, HONORS, AND FELLOWSHIPS

Equity Paper Award, *Transportation Research Board Bicycle Transportation Committee (ACH20)*, 2024

Outstanding Reviewer 2022, *Transportation Research Part D: Transport and Environment* 2023

Best Dissertation Award, *World Society for Transport and Land Use Research* 2021

2020 Outstanding Paper Award, *Travel Behaviour and Society* 2021

Distinguished Dissertation Award in Urban and Regional Planning, *University of Michigan* 2020

Rackham One-Term Dissertation Fellowship, *University of Michigan* 2019

AICP Student Project Award, *American Planning Association* 2018

Honorable Mention, Karen Polenske Best Student Paper Award, *Intl. Assoc. for China Planning* 2018

ICR-Rackham Summer Training Award (\$2500), *University of Michigan* 2016

Engaged Pedagogy Initiative Fellow, *University of Michigan* 2014

Meng Minwei Exchange Student Scholarship (25,000 RMB), *Shun Hing Group Foundation* 2011

PUBLICATIONS

Peer-reviewed Journal Articles

(Note: Student co-authors are underlined.)

[29] Fang, J., **Yan, X.**, Tao, T., Chen, C. (2024). Non-linear Effects of Built Environment Factors on Mode Choice: A Tour-Based Analysis. *Journal of Transport and Land Use*.

- [28] Yin, Z., Rybarczyk, G., Zheng, A., Su, L., Sun, B. **Yan, X.** (2024). Shared micromobility as a first- and last-mile transit solution? Spatiotemporal insights from a novel dataset. *Journal of Transport Geography*.
- [27] Forrister, A., Kuligowski, E., Sun, Y., Yan, X., Lovreglio, R., Cova, T., Zhao, X. (2024). Analyzing Risk Perception, Evacuation Decision and Delay Time: A Case Study of the 2021 Marshall Fire in Colorado. *Travel Behaviour and Society*, 35, 100729. <https://doi.org/10.1016/j.tbs.2023.100729>
- [26] Su, L., **Yan, X.**, Zhao, X. (2024). Micromobility equity: A comparison of shared e-scooters and station-based bikeshare in Washington DC. *Transport Policy*, 145, 25-36. <https://doi.org/10.1016/j.tranpol.2023.10.008>
- [25] Huang, E., Yin, Z., Broaddus, A., **Yan, X.** (2024). Transit and shared e-scooter integration: Travel behavior insights from Los Angeles and Washington D.C.. *Travel Behavior and Society*, 34, 100663. <https://doi.org/10.1016/j.tbs.2023.100663>
- [24] **Yan, X.**, Zhao, X., Broaddus, A., Johnson, J., Srinivasan, S. (2023). Evaluating shared e-scooters' potential to enhance public transit and reduce driving. *Transportation Research Part D: Transport and Environment*, 117, 103640. <https://doi.org/10.1016/j.trd.2023.103640>
- [23] Yang, W., Jafarzadehfadaki, M., **Yan, X.**, Zhao, X., Jin, X., Frolinch, D., Sisiopiku, V. (2023). Shared E-scooters: User Characteristics and Usage Patterns across Four U.S. Cities. *Transportation Research Record*, 03611981231194626. <https://doi.org/10.1177/03611981231194626>
- [22] Fang, J., **Yan, X.**, Bejleri, I., Chen, C. (2022). Which trip destination matters? Estimating the influence of the built environment on mode choice for home-based complex tours. *Journal of Transport Geography*, 105, 103474. <https://doi.org/10.1016/j.jtrangeo.2022.103474>
- [21] Wu, A., Kuligowski, E., Lovreglio, R., Nilsson, D., Cova, T., Xu, Y., **Yan, X.**, & Zhao, X. (2022). Wildfire evacuation decision modeling using GPS data. *International Journal of Disaster Risk Reduction*, 83, 103373. <https://doi.org/10.1016/j.ijdrr.2022.103373>
- [20] Xu, Y., Zhao, X., Lovreglio, R., Kuligowski, E., Nilsson, D., Cova, T., & **Yan, X.** (2022). A highway vehicle routing dataset during the 2019 Kincade Fire evacuation. *Scientific Data*. <https://doi.org/10.1038/s41597-022-01731-6>
- [19] Zhao, X., Xu, Y., Lovreglio, R., Kuligowski, E., Nilsson, D., Cova, T., Wu, A., **Yan, X.** (2022). Estimating wildfire evacuation decision and departure timing using large-scale GPS data. *Transportation Research Part D: Transport and Environment*, 107, 103277. <https://doi.org/10.1016/j.trd.2022.103277>
- [18] Xu, Y., **Yan, X.**, Sisiopiku, V., Merlin, L., Xing, F., Zhao, X. (2022). Micromobility trip origin and destination inference using General Bikeshare Feed Specification (GBFS) data. *Transportation Research Record: Journal of the Transportation Research Board*, 2676 (11), 223-238. <https://doi.org/10.1177/03611981221092005>
- [17] **Yan, X.**, Bejleri, I., Zhai, L. (2022). A spatiotemporal analysis of transit accessibility to low-wage jobs in Miami-Dade County. *Journal of Transport Geography*, 98, 103218. <https://doi.org/10.1016/j.jtrangeo.2021.103218>
- [16] **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 bikesharing. *Transportation Research Part D: Transport and Environment*, 12, 103088. <https://doi.org/10.1016/j.trd.2021.103088>

- [15] Wang, X., **Yan, X.**, Zhao, X., Cao, Z. (2022). Identifying latent shared mobility preference segments in low-resourced communities: Ridehailing, fixed-route bus, and mobility-on-demand transit. *Travel Behaviour and Society*, 26, 134-163. <https://doi.org/10.1016/j.tbs.2021.09.011>
- [14] Chen, S., **Yan, X.**, Pan, H., Deal, B. (2021). Using big data for last-mile performance evaluation: An accessibility-based approach. *Travel Behaviour and Society*, 25, 153-163. <https://doi.org/10.1016/j.tbs.2021.06.003>
- [13] Steiner, R., Bejleri, I., Bai, X., Han, M., **Yan, X.** (2021). Partnerships between agencies and transportation network companies for transportation-disadvantaged populations: Opportunities and challenges. *Transportation Research Record: Journal of the Transportation Research Board*, 2675 (12), 1260-1271. <https://doi.org/10.1177/03611981211032629>
- [12] **Yan, X.**, Zhao, X., Han, Y., Van Hentenryck, P., Dillahun, T. (2021). Mobility-on-demand versus fixed-route transit systems: An evaluation of traveler preferences in low-income communities. *Transportation Research Part A: Policy and Practice*, 148, 481-495. <https://doi.org/10.1016/j.tra.2021.03.019>
- [11] **Yan, X.** (2021). Toward accessibility-based planning: Addressing the myth of travel-cost savings. *Journal of the American Planning Association*, 87 (3), 409-423. <https://doi.org/10.1080/01944363.2020.1850321>
- [10] Merlin, L., **Yan, X.**, Xu, Y., Zhao, X. (2021). A segment-level model of shared scooter origins and destinations. *Transportation Research Part D: Transport and Environment*, 92, 102709. <https://doi.org/10.1016/j.trd.2021.102709>
- [9] Xu, Y., **Yan, X.**, Liu, X., Zhao, X. (2021). Identifying key factors associated with ride-splitting rate and modeling their nonlinear relationships. *Transportation Research Part A: Policy and Practice*, 144, 170-188. <https://doi.org/10.1016/j.tra.2020.12.005>
- [8] Deng, L., **Yan, X.**, Chen, J. (2021). Housing affordability, subsidized lending and cross-city variation in the performance of China's housing provident fund program. *Housing Studies*, 36(4), 455-478. <https://doi.org/10.1080/02673037.2019.1585521>
- [7] Zhao, X., **Yan, X.**, Yu, A., Van Hentenryck, P. (2020). Prediction and behavioral analysis of travel mode choice: A comparison of logit models and machine learning. *Travel Behavior and Society*, 20, 22-35. <https://doi.org/10.1016/j.tbs.2020.02.003> (**Won the 2020 Outstanding Paper Award**)
- [6] **Yan, X.**, Liu, X., Zhao, X. (2020). Using machine learning for direct demand modeling of ridesourcing services in Chicago. *Journal of Transport Geography*, 83, 102661. <https://doi.org/10.1016/j.jtrangeo.2020.102661>
- [5] **Yan, X.** (2020). Evaluating household residential preferences for walkability and accessibility across three U.S. regions. *Transportation Research Part D: Transport and Environment*, 80, 102255. <https://doi.org/10.1016/j.trd.2020.102255>
- [4] **Yan, X.**, Levine, J., Marans, R. (2019). The effectiveness of parking policies to reduce parking demand pressure and car use. *Transport Policy*, 73, 41-50. <https://doi.org/10.1016/j.tranpol.2018.10.009>
- [3] **Yan, X.**, Levine, J., Zhao, X. (2019). Integrating ridesourcing services with public transit: An evaluation of traveler responses combining revealed and stated preference data. *Transportation Research Part C: Emerging Technologies*, 105, 683-696. <https://doi.org/10.1016/j.trc.2018.07.029>
- [2] Goodspeed, R., **Yan, X.**, Hardy, J., Vydiswaran, V.G.V., Berrocal, V.J., Clarke, P., R., Gomez-Lopez, I.N., Romero, D., Veinot, T.C. (2018). Comparing the data quality of GPS devices and smartphones for

assessing relationships between place, mobility, and health: A field study. *Journal of Medical Internet Research mHealth and uHealth*, 6 (8), e168. <https://doi.org/10.2196/mhealth.9771>

[1] Hardy, J., Veinot, T. C., **Yan, X.**, Berrocal, V. J., Clarke, P., Goodspeed, R., Gomez-Lopez, I.N., Romero, D., Vydiswaran, V. G. V. (2018). User acceptance of location-tracking technologies in health research: implications for study design and data quality. *Journal of Biomedical Informatics*, 79, 7-19. <https://doi.org/10.1016/j.jbi.2018.01.003>

Peer-reviewed Book Chapters

[1] Goodspeed, R., **Yan, X.** (2017). Crowdsourcing street beauty: Visual preference surveys in the big data era. in Schintler, L.A. and Chen, Z. (Eds.), *Big Data for Regional Science (Routledge Advances in Regional Economics, Science and Policy* (pp.75-93). London and New York: Routledge.

Peer-reviewed Conference Proceedings

[2] Xu, X., **Yan, X.**, and Dillahunt, T. (2019). Reaching hard-to-reach populations: an analysis of survey recruitment methods. In *Conference Companion Publication of the 2019 Conference on Computer Supported Cooperative Work and Social Computing* (pp. 428-432). <https://doi.org/10.1145/3311957.3359447>

[1] **Yan, X.**, Levine, J., Marans, R. (2019). The effectiveness of parking policies to reduce parking demand pressure and car use. *Proceedings of Transportation Research Board 98th Annual Meeting*.

Reports and Other Publications

[9] **Yan, X.**, Hunter, M., Polimetla, T., Robinson, K., Patel, A., Kuang, D., Zhao, X., Sanchez, T. (2023). Promoting equitable AI applications in transportation (No. STRIDE Project P6).

[8] Zhao, X., **Yan, X.**, Sisiopiku, V., Kaza, N., Kittner, N., McDonald, N., Jin, ... & Shroyer, N. (2023). Mobility-on-Demand Transit for Smart and Sustainable Cities (No. STRIDE Project D4).

[7] Forrister, A., **Yan, X.**, Yin, Z., Zhao, X., Cova, T., Lovreglio, R., Nilsson, D., & Kuligowski, E. (2022). Survey of Evacuation Behavior in the 2021 Marshall Fire, Colorado. *Natural Hazards Center Quick Response Grant Report Series*, 349. Boulder, CO: Natural Hazards Center, University of Colorado Boulder.

[6] Zhao, X., Sisiopiku, V., Steiner, R., Xu, Y., Liu, Y., **Yan, D.**, ... & Suarez, J. (2022). Micromobility as a Solution to Reduce Urban Traffic Congestion (No. STRIDE Project B3).

[5] Bejleri I., Zhang, Y., Zhai, L., and **Yan, X.** (2020). Timely, dynamic, and spatially accurate roadway incident information to support real-time management of traffic operations. *Florida Department of Transportation*, Report No. BDV31-977-111.

[4] Dillahunt, T., **Yan, X.** (2019). Mobility-on-demand versus fixed-route transit systems: An evaluation of traveler preferences in low-income communities. Poverty Solutions, University of Michigan. Policy Brief, March 2019.

[3] **Yan, X.** (2014). The mortgage interest deduction: The debate and possible reforms. *Agora: The Urban Planning and Design Journal of the University of Michigan*, 8, 84-93.

[2] Yu T., **Yan, X.** (2011). Creating a dynamic urban planning assessment system: to solve the problem of authoritarian plans. *Modern Urban Research* (In Chinese), 12, 22-27.

- [1] **Yan, X.**, Yu, T., Wang, X. (2011). Headquarters economy in the context of globalization: A review. *Modern Urban Research* (In Chinese), 9, 91-96.

RESEARCH FUNDING

| | |
|---|-------------|
| <i>Transportation as a Social Determinant of Health During Hurricane Idalia</i> | 2023 - |
| · Funder: Natural Hazards Center | |
| · My role: PI | |
| <i>Center for Equitable Transit-Oriented Communities, Tier-1 University Transportation Center</i> | 2023 - |
| · Funder: U.S. Department of Transportation | |
| · My role: UF Co-PI | |
| <i>Scan and Review of Autonomous Shuttle Operations and Other Personal Transport</i> | 2023 - |
| · Funder: Florida Department of Transportation | |
| · My role: Co-PI | |
| <i>Strategies to Improve Application of Research Results in the Research Life Cycle</i> | 2023 - |
| · Funder: The National Cooperative Highway Research Program (NCHRP) | |
| · My role: UF Co-PI | |
| <i>Leveraging Mobility Data Analytics to Inform Mobility Hub Development in Florida</i> | 2023 - |
| · Funder: Florida Department of Transportation | |
| · My role: PI | |
| <i>Federal Transit Administration (FTA) Research to Practice Initiative Grant</i> | 2022 - 2024 |
| · Funder: Federal Transit Administration | |
| · My role: UF PI | |
| <i>Survey of Evacuation Behavior in the 2021 Boulder County, CO Grass Fires</i> | 2022 - 2022 |
| · Funding source: Natural Hazards Center | |
| · My role: PI | |
| <i>Promoting Equitable AI in Transportation</i> | 2022 - 2023 |
| · Funder: USDOT Region 4 STRIDE UTC center | |
| · My role: PI | |
| <i>Investigating Shared E-scooters as a First/Last Mile Connection to Transit</i> | 2021 - 2022 |
| · Funder: Ford Motor Company | |
| · My role: Co-PI | |
| <i>Mobility-on-Demand Transit for Smart and Sustainable cities</i> | 2020 - 2021 |
| · Funder: USDOT Region 4 STRIDE UTC center | |
| · My role: Co-PI | |
| <i>Mobilizing Accessibility in Detroit and Ypsilanti</i> | 2018 - 2019 |
| · Funder: Poverty Solutions University of Michigan | |
| · My role: Co-PI | |

REFEREED CONFERENCE PRESENTATIONS

- [22] Xu, X., **Yan, X.**, Fang, J., Bejleri, I. (2024). Examining Bicyclist Safety Inequity Across Neighborhoods in Florida. *The Transportation Research Board 2024 Annual Meeting*.

- [21] Yin, Z., Rybarczyk, G., Zheng, A., Su, L., Sun, B., **Yan, X.** (2024). Shared micromobility as a first-and last-mile transit solution? Insights from a novel dataset. *The Transportation Research Board 2024 Annual Meeting*.
- [20] Duarte, E., Zheng, A., Merlin, L., Renne, J., **Yan, X.** (2024). Planning for multimodal mobility hubs in the new mobility era: state of practice, research trends, and knowledge gaps. *The Transportation Research Board 2024 Annual Meeting*.
- [19] Zhang, X., Zhao, X., **Yan, X.** (2024). Are mobile device location data biased for human mobility analysis? *The Transportation Research Board 2024 Annual Meeting*.
- [18] Qian, Y., Polimetla, T., Sanchez, T., **Yan, X.** (2024). How do transportation professionals perceive the impacts of AI applications in transportation? A latent class cluster analysis. *The Transportation Research Board 2024 Annual Meeting*.
- [17] Zheng, A., **Yan, X.** (2023). The location problem of EV charging stations: research trends, critical gaps, and a future agenda. *The Transportation Research Board 2023 Annual Meeting*.
- [16] Huang, E., Yin, Z., Broaddus, A., **Yan, X.** (2023). Transit and shared e-scooter integration: Travel behavior insights from Los Angeles and Washington D.C.. *The Transportation Research Board 2023 Annual Meeting*.
- [15] Su, L., Zhang, X., **Yan, X.**, Zhao, X. (2023). Exploring nonlinear relationships and preference heterogeneity in mode-switching behavior under a mobility-on-demand transit system. *The Transportation Research Board 2023 Annual Meeting*.
- [14] Yang, W., Jafarzadehfadaki, M., **Yan, X.**, Zhao, X., Jin, X., Frolinch, D., Sisiopiku, V. (2023). Shared E-scooters: User Characteristics and Usage Patterns across Four U.S. Cities. *The Transportation Research Board 2023 Annual Meeting*.
- [13] Su, L., **Yan, X.**, Zhao, X. (2022). Micromobility equity: A comparison of shared e-scooters and station-based bikeshare in Washington DC. *The Transportation Research Board 2022 Annual Meeting*.
- [12] Zhao, X., Xu, Y., Lovreglio, R., Kuligowski, E., Nilsson, D., Cova, T., Wu, A., **Yan, X.** (2022). Estimating Wildfire Evacuation Decision and Departure Timing Using Massive GPS Data. *The Transportation Research Board 2022 Annual Meeting*.
- [11] **Yan, X.**, Zhao, X., Broaddus, A., Johnson, J., Srinivasan, S. (2022). Exploring the potential of shared e-scooters as a last-mile complement to public transit. *The Transportation Research Board 2022 Annual Meeting*.
- [10] **Yan, X.**, Bejleri, I., Zhai, L. (2022). A spatiotemporal analysis of transit accessibility to low-wage jobs in Miami-Dade County. *The Transportation Research Board 2022 Annual Meeting*.
- [9] **Yan, X.**, Yang, W., Zhao, X. (2022). Do e-scooters complement or compete with public transit and station-based bikesharing? A case study of Washington DC. *The Transportation Research Board 2022 Annual Meeting*.
- [8] Zhang, X., Zhou, Z., **Yan, X.**, Zhao, X. (2022). Examining Spatial Heterogeneity in the Determinants of Ridesourcing Trips with Explainable Machine Learning. *The Transportation Research Board 2022 Annual Meeting*.
- [7] Fang, J., **Yan, X.**, Bejleri, I. (2022). Which Trip Destination Matters? Estimating the Influence of Land Use on Mode Choice for Home-Based Complex Tours. *The Transportation Research Board 2022 Annual Meeting*.

- [6] Wang, X., **Yan, X.**, Zhao, X., & Cao, Z. (2021). Identifying latent shared mobility preference segments in low-resourced communities: Ride-hailing, fixed-route bus, and mobility-on-demand transit. *The Transportation Research Board 2021 Annual Meeting*.
- [5] Steiner, R., Bejleri, I., Bai, X., Han, M., **Yan, X.** (2021). Partnerships between Agencies and Transportation Network Companies for Transportation-Disadvantaged Populations: Benefits, Problems, and Challenges. *The Transportation Research Board 2021 Annual Meeting*.
- [4] Zhao, X., Wang, X., **Yan, X.**, & Cao, Z. (2021). Assessing preference heterogeneity for Mobility-on-Demand transit service in low-income communities: A latent segmentation based decision tree method. *The Transportation Research Board 2021 Annual Meeting*.
- [3] Xu, Y., **Yan, X.**, Sisiopiku, V. P., Merlin, L. A., Xing, F., & Zhao, X. (2021). Micromobility trip origin and destination inference using General Bikeshare Feed Specification (GBFS) data. *The Transportation Research Board 2021 Annual Meeting*.
- [2] Zhao, X., Zhou, Z., **Yan, X.**, & Van Hentenryck, P. (2020). Distilling black-box travel mode choice model for behavioral interpretation. *The Transportation Research Board 2020 Annual Meeting*.
- [1] Zhao, X., Liu, X., & **Yan, X.** (2020). Modeling demand for ridesourcing services in the City of Chicago: A direct demand machine learning approach. *The Transportation Research Board 2020 Annual Meeting*.

OTHER CONFERENCE PRESENTATIONS

“E-scooters as a last-mile feeder mode to public transit: how, where, and when.” *The 16th International Association for China Planning (IACP) Annual Conference*, virtually from Wuhan, China, June 23-27, 2022.

“Micromobility equity: A comparison of shared e-scooters and station-based bikeshare in Washington DC.” *7th UTC Conference for the Southeastern Region*, Boca Raton, Florida, March 24-25, 2022.

“Exploring the potential of shared e-scooters as a last-mile complement to public transit.” *7th UTC Conference for the Southeastern Region*, Boca Raton, Florida, March 24-25, 2022.

“Do e-scooters fill mobility gaps and promote equity? A spatiotemporal analysis using open big data.” *Association of Collegiate Schools of Planning (ACSP) Annual Conference*, October 7-8 & 21-23, 2021.

“Do e-scooters fill mobility gaps and promote equity before and during COVID-19? A spatiotemporal analysis using open big data.” *The 15th International Association for China Planning (IACP) Annual Conference*, virtually from Nanjing, China, September 11-12, 2021.

“Do e-scooters fill mobility gaps before and during COVID-19? A spatiotemporal analysis using open big data.” *2021 World Symposium on Transport and Land Use Research (WSTLUR)*, virtually from Portland, Oregon, August 9-11, 2021.

“Evaluating household residential preferences for walkability and accessibility across three U.S. regions.” *The 14th International Association for China Planning (IACP) Annual Conference*, virtually from Shenzhen, China, December 5-13, 2020.

“Using machine learning for direct demand modeling of ridesourcing services in Chicago.” *The Transportation Research Board (TRB) 99th Annual Meeting*, Washington DC, January 12-16, 2020

“Mobility-on-demand versus fixed-route transit systems: An evaluation of traveler preferences in low-income communities.” *Association of Collegiate Schools of Planning (ACSP) Annual Conference*, Greenville, SC, October 24-27, 2019.

“The value of accessibility in residential location choice.” *The 13th International Association for China Planning (IACP) Annual Conference*, Chengdu, China, June 14-15, 2019.

“The effectiveness of parking policies to reduce parking demand pressure and car use.” The Transportation Research Board (TRB) 98th Annual Meeting, Washington DC, January 13-17, 2019.

“The value of accessibility in residential location choice.” *Association of Collegiate Schools of Planning (ACSP) Annual Conference*, Buffalo, NY, October 24-28, 2018.

“Integrating ridesourcing services with public transit: An evaluation of traveler responses combining revealed and stated preference data.” *The 12th International Association for China Planning (IACP) Annual Conference*, Xi’an, China, June 29-30, 2018.

“Efficiency and equity issues in the use of Chinese Housing Provident Fund: Evidence from seven major cities.” *Association of Collegiate Schools of Planning (ACSP) Annual Conference*, Denver, CO, October 11-15, 2017.

“Rethinking agglomeration economies, accessibility, and productivity: the importance of urban form.” *Annual Conference of the American Association of Geographers (AAG)*, Boston, MA, April 5-9, 2017.

INVITED TALKS, ROUNDTABLES, AND WORKSHOPS

Invited Talks

“Strategies for Promoting Shared Micromobility to Complement Public Transit”, **Zube Lecture series**, Department of Landscape Architecture and Regional Planning, University of Massachusetts, Amherst, September 28, 2023

“Equity in New Mobility Services: The Cases of Mobility-on-demand Transit and Shared Micromobility”, *The 25th Chinese Overseas Transportation Association Winter Symposium*, January 8, 2023.

“Toward Accessibility-based Planning”, *Occasional Transport Research Talks* hosted by Nick Klein (Cornell Univ.) & Kelcie Ralph (Rutgers Univ.), April 15, 2022.

“Leveraging Spatial Big Data and AI for Sustainable and Equitable Transportation.” *Department of Civil & Coastal Engineering, University of Florida*, March 15, 2022.

“Leveraging Spatial Data Science for Smart and Equitable Public Transportation.” *Department of Geography & Geoinformation Science, George Mason University*, February 11, 2022.

“Urban Planning in the Digital Era: Leveraging Data Science for Smart and Equitable Transportation.” *Department of Geography, Planning & Sustainability, Rowan University*, February 8, 2022.

“Urban Planning in the Digital Era: Leveraging Data Science for Smart and Equitable Transportation.” *Department of Community & Regional Planning, University of Nebraska-Lincoln*, February 3, 2022.

“Urban Planning in the Digital Era: Leveraging AI and Data Science for Smart and Equitable Transportation.” *College of Design, Construction and Planning, University of Florida*, January 31, 2022.

“Machine Learning in Travel Behavior Research.” *Transportation Research Board Standing Committee AMS50 Webinar Series*, November 12, 2021.

“Do e-scooters fill mobility gaps and promote equity before and during COVID-19? A spatiotemporal analysis using open big data.” *UF Biocomplexity Engineering Group Seminars*, October 19, 2021.

"Exploring the potential for public transit and share micromobility integration." *Ford Motor Company Robotics and Mobility Research EMM/SAR Meeting Series*, September 30, 2021.

"The effectiveness of parking policies to reduce parking demand pressure and car use." *511NY Rideshare Car Free Day Webinar*, September 14, 2021.

"Using big data and machine learning for transportation research." *University of Florida Student Chapter for the Institute of Transportation Engineers*, March 4, 2021.

"The promises and pitfalls of machine learning and big data: Reflectively leveraging data science for transportation planning." *Department of City and Regional Planning, University of North Carolina, Chapel Hill*, November 30, 2020.

"Ridesourcing as a solution to the last-mile travel problem: Evidence from stated preference data." *Next Generation Transportation Systems Seminar*. University of Michigan, Ann Arbor, January 17, 2018.

Panels, Roundtables, and Workshops

"Applying AI Methods to Mobility" (Moderated by Renee Autumn Ray, other panelists include Nicole Dupuis, Robert Sheehan, Philip Pugliese). Workshop on *Accelerating Mobility Innovation: Overcoming Challenges and Re-envisioning Opportunities*. Transportation Research Board 2024 Meeting, January 7, 2024.

"Exploring Micromobility: Research on Safety, Equity, Transit Integration, and Testbeds," pre-organized RiM session (Moderated by Wenwen Zhang, other panelists include Hannah Younes, Ralph Buehler, Janille Smith-Colin, and Greg Griffin). *Association of Collegiate Schools of Planning (ACSP) 2023 Chicago Annual Conference*, October 19-21, 2023.

"Micromobility" Panel Session (Moderated by Nikhil Kaza, other panelists include Mike Fortier, Barbara Godwin, and Will Sowers). *UNC Clean Tech Summit 2022*, Chapel Hill, North Carolina, March 30, 2022.

"Exploring nonlinear relationships with machine learning." Roundtable (Moderated by Jason Cao, other panelists include Tao Tao and Sadegh Sabouri). *Association of Collegiate Schools of Planning (ACSP) Annual Conference*, October 7-8 & 21-23, 2021.

"Exploring nonlinear relationships with machine learning." Roundtable (Moderated by Jason Cao, other panelists include Tao Tao, Kailai Wang, and Wenjia Zhang). *The 15th International Association for China Planning (IACP) Annual Conference*, virtually from Nanjing, China, September 11-12, 2021.

"Extracting travel behavioral insights from black-box machine-learning models." (jointly presented with Xilei Zhao) *Workshop on Machine Learning Methods to Calibrate Integrated Land Use and Transport Models*. Georgia Institute of Technology, Atlanta. June 13-14, 2019.

TEACHING

Instructor

CGN 4905/6905 Sustainable Transportation and Public Transit, UF

· Enrollment: 16; Evaluations: 4.74/5

Fall 2023

CGN 4905/6905 Applied Data Science in Civil & Environmental Engineering, UF

· Enrollment: 4; Evaluations: 4.90/5

Fall 2023

- Enrollment: 5; Evaluations: 4.75/5 Fall 2022
- Enrollment: 12; Evaluations: 4.68/5 Fall 2021

Guest Lecturer

- Smart Practicum Planning Studio*, University of Texas, Austin September 19, 2023
- Presentation title: *Planning Smart Micromobility Systems Using Open Big Data*
- Highway Safety Analysis*, University of Florida Nov 19, 2020
- Presentation title: *Spatial big data applications in travel safety research and practice*
- Transportation Data Analytics*, University of Florida Oct 20, 2020
- Presentation title: *Spatial data analysis and mapping with R*
- Colloquium*, University of Florida Sep 30, 2019
- Presentation title: *Designing and conducting a dissertation research project*

Other Teaching Experience

- Graduate Student Instructor** for *Introduction to Statistics for Urban Planning*, UMich Fall 2014
- Teaching Evaluations: 4.73/5
- Teacher** for *AP Statistics*, *GRE/GMAT Analytical Writing*, New Oriental School, China 2012 - 2013
- Average rating: 4.7/5.0
- Engaged Pedagogy Initiative Fellow** Fall 2014
- LSA Community-Engaged Academic Learning, University of Michigan

STUDENTS MENTORED AND SUPERVISED

Doctoral Student Advisees

- Duanya Lyu (PhD student in Civil Engineering, Fall 2023 -)
- Yiheng Qian (PhD student in Civil Engineering, Fall 2023 -)

Master's Student Advisees

- Scott Fossier (Civil Engineering, Fall 2023')
- Anran Zheng (Civil Engineering, Summer 2023')

Master's Thesis Committee Chair/co-chair

- Christopher Wolf (Urban and Regional Planning)

Master's Thesis Committee

- Daeyun Gi (Mechanical and Aerospace Engineering, Summer 2023')

Independent/Directed Study Students

- Shoujing Ke (Undergrad in Computer Science, Fall 2022')
- Harrison Stark (Undergrad in Computer Science, Spring 2023')

Student Research Assistants (RAs)

Current RAs:

- Ksenia Velichko (Undergrad in Computer Science)
- Eliana Duarte (Undergrad in Civil Engineering, selected for the McNair Scholars Program)
- Yilong Dai (Master's student in Computer Science)
- Kaiyue Wang (Master's student in Computer Science)

Former RAs:

- Shoujing Ke (Undergrad in Computer Science)
- Tejaswi Polimetla (Undergrad in Economics&Geography)
- Yuxuan Zhang (Master's student in Computer Science)
- Ruoyang Xiong (Master's student in Computer Science)
- Amay Patel (Undergrad in Computer Science)
- Lin Su (M.S. in Civil Eng, admitted to UT Austin Transportation Engineering PhD program)
- Erik Huang (Undergrad in Civil Eng, admitted to Northwestern Transportation Eng PhD program)
- Qi Zheng (Undergrad in Biology)
- Jack Rummler (Undergrad in Sustainability Studies)

FACULTY SERVICE

Graduate Student Admissions

- In charge of the Transportation Engineering graduate student admissions, UF 2023 -

Faculty Search Committee

- Computer and Information Science and Engineering, UF 2022 - 2023

Steering Committees

- Internal Steering Committee (Transit Lead), UF Transportation Institute, UF 2022 -

SERVICE TO THE PROFESSION

Transportation Research Board (TRB) Committee Services

- AP020 Innovative Public Transportation Services & Technologies:
Committee Member & Research Coordinator 2022 -
- AED30 Information Systems & Technology:
Committee Member 2022 -

Editorial Board Member, *Transportation Research Part D: Transport and Environment* 2023 -

Board of Directors Member, *International Association for China Planning* 2019 - 2023

Panel Member/Proposal Reviewer

- *Panel member* for National Cooperative Highway Research Program (NCHRP) Project 07-34:
Toward Artificial Intelligence-Enabled Decision Support Systems for TSMO Applications 2022-
- *Panel member* for Transit Cooperative Research Program (TCRP) Project H-59:
Racial Equity, Black America and Public Transportation 2021 - 2023
- *Panel member* for NSF CMMI/CIS Program 2023
- *Proposal reviewer* for Mineta Transportation Institute 2023
- *Ad hoc reviewer* for NSF Economics Program 2021
- *Proposal reviewer* for USDOT Tier-1 University Transportation Center CTEDD 2019

Conference/Symposium/Workshop Organizing Committee Member

- *2023 Research-to-Practice Transit Symposium*, Caltrans/UFTI/APTA/MTI/UC Davis 2023
- *XPOTENTIAL 2022*, Association for Unmanned Vehicle Systems International (AUVSI) 2022
- TRB 101st Annual Conference Young Members Coordinating Council “Early Academic Successful Careers: Resources and Advice” Workshop 2022
- *2022 Research-to-Practice Transit Symposium*, Caltrans/UFTI/APTA/T-Score UTC 2022
- *2021 Research-to-Practice Transit Symposium*, Caltrans/UFTI/APTA/T-Score UTC 2021

Area Editor, CICTP 2023, *Chinese Overseas Transportation Association (COTA)*

2023

Manuscript/Report Reviewer

Transportation Research Part A: Policy and Practice, Transportation Research Part D: Transport and Environment, Journal of the American Planning Association, Journal of Transport Geography, Transportation, Transport Policy, Travel Behavior and Society, Transportmetrica A: Transport Science, Journal of Land Use and Transport, Scientific Reports, Housing Studies, Environment and Planning B: Urban Analytics and City Science, Geoforum, Sustainable Cities and Society, Urban Rail Transit, Safety Science, TRB Annual Meeting, IACP Annual Meeting, National Institute of Congestion Reduction

Moderator/Discussant/Facilitator

- Moderator for the “Bus Stop Spacing” Session in *2023 Research-to-Practice Transit Symposium*, October 25, 2023.
- Discussant for the “Who’s Riding the Bus” Session in *Association of Collegiate Schools of Planning 2023 Chicago Annual Conference*, October 20, 2023.
- Moderator for the “Digital Future, Digital Connectivity, and Cybersecurity” Session in *2021 Research-to-Practice Transit Symposium*, October 20, 2023.

SERVICE TO SOCIETY

City of Gainesville Citizen Transit Advisory Committee (CTAC)

- Providing feedback to the Transit Route Restoration Plan 2024

City of Gainesville Climate Action Plan Development Team

- Participating in the city’s climate action plan creation process 2023 - 2024

MEDIA

Mentions in the Press / Media Coverage of Research

Herbert, Kiran. (December 5, 2023). Shared E-Scooters As a Last-Mile Transit Solution? *Better Bike Share Partnership*. <https://betterbikeshare.org/2023/12/05/shared-e-scooters-as-a-last-mile-transit-solution/>

Diaz, Robert. (March 3, 2023). Gainesville residents contemplate people mover system. *WUFT*. <https://www.wuft.org/news/2023/03/03/gainesville-residents-contemplate-people-mover-system/>

Spin Blog Post. (February 10, 2022). New Research Shows Positive Impacts of Micromobility May Be Underestimated. *Spin (Ford Mobility)*. <https://www.spin.app/blog-posts/new-research-shows-positive-impacts-of-micromobility-may-be-underestimated>

Herbert, Kiran. (May 12, 2021). Xiang Yan wants to make micromobility better. *Better Bike Share Partnership*. <https://betterbikeshare.org/2021/05/12/xiang-yan-wants-to-make-micromobility-better/>

Ionescu, Diana. (April 8, 2021). How e-scooters can complement public transit. *Planetizen*. Available at: <https://www.planetizen.com/news/2021/04/112885-how-e-scooters-can-complement-public-transit>

Kuntzman, Gersh. (March 4, 2021). E-Scooters Are Best for Short Trips to Transit, Shops: Study. *Streetsblog NYC*. Available at: <https://nyc.streetsblog.org/2021/03/04/e-scooters-are-best-for-short-trips-to-transit-shops-study/>

Galoustian, Gisele. (March 1, 2021). Scoot over! Study reveals E-scooter use in Washington D.C. *Science Daily*. Available at: <https://www.sciencedaily.com/releases/2021/03/210301091147.htm>

Guest, Greta. (August 28, 2018). Commuters: Ridesourcing could fix public transit. *Michigan News*. Available at: <https://news.umich.edu/commuters-ridesourcing-could-fix-public-transit/>

Opinion Pieces

Yan, X. (Apr 5, 2021). Make e-scooters work with transit, not against it. *Greater Greater Washington*. Available at: <https://ggwash.org/view/80884/make-e-scooters-work-with-transit-not-against-it>

STATISTICAL COMPUTATIONAL METHODS TRAINING

- *Neural Networks for Computing* Depart. of Computer and Information Science and Engineering, UF
- *Database Management Systems* Depart. of Computer and Information Science and Engineering, UF
- *Transportation Data Analytics (Machine learning)* Department of Civil Engineering, UMich
- *Clustered and Longitudinal Analysis* Department of Biostatistics, UMich
- *Spatial Statistics* Department of Biostatistics, UMich
- *Maximum Likelihood Estimation I: Generalized Linear Models* ICPSR Summer Program, UMich
- *Quantitative Methods for Program Evaluation* Ford School of Public Policy, UMich
- *Quantitative Planning Methods* Department of Urban and Regional Planning, UMich
- *Introduction to Probability Theory and Statistics* Nanjing University, China