Zhihong Yao, Ph.D., Associate professor

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EDUCATION

Sep 2014 – Dec 2020 **Southwest Jiaotong University**
Ph.D. in Traffic engineering
Thesis title: *Adaptive traffic signal control based on dynamic platoon dispersion model*

Sep 2018 – Sep 2019 **University of Wisconsin, Madison**
Visiting Ph.D. Student at the Traffic Operations and Safety Laboratory (TOPS Lab)

Sep 2010 – Jun 2014 **Southwest Jiaotong University**
Bachelor in Traffic engineering

ACADEMIC POSITIONS

Jan 2022 – Present **Associate Professor,** School of Transportation and Logistics, Southwest Jiaotong University.

Apr 2020 – Dec 2021 **Assistant Professor,** School of Transportation and Logistics, Southwest Jiaotong University.

PUBLICATIONS

Journal Articles

1. **Z. Yao***, Y. Ma, T. Ren, and Y. Jiang, "Impact of the heterogeneity and platoon size of connected vehicles on the capacity of mixed traffic flow," *Applied Mathematical Modelling*, vol. 125, pp. 367–389, Jan. 2024. DOI: 10.1016/j.apm.2023.09.001.

2. Y. Wang, Y. Jiang, Y. Wu, and **Z. Yao***, "Mitigating traffic oscillation through control of connected automated vehicles: A cellular automata simulation," *Expert Systems with Applications*, vol. 235, p. 121 275, Jan. 2024. DOI: 10.1016/j.eswa.2023.121275.

3. Y. Ai, Y. Li, X. Han*, **Z. Yao**, and Z. Li, "Real-time risk assessment method for multi-aircraft interaction based on potential field theory," *Physica A: Statistical Mechanics and its Applications*, vol. 633, p. 129 423, Jan. 2024. DOI: 10.1016/j.physa.2023.129423.

4. **Z. Yao**, T. Ren, Y. Wang*, Z. Xu, and Y. Jiang, "Fundamental diagram of mixed traffic flow considering dedicated and shared lanes management policies for cavs," *IEEE Transactions on Transportation Electrification*, vol. 2023, pp. 1–16, Nov. 2023. DOI: 10.1109/TTE.2023.3332054.

5. Y. Jiang, Z. Yi, G. Xiao, H. Li, and **Z. Yao***, "Modeling the effect of the platoon size of cavs on mixed traffic flow: A cellular automaton method," *Journal of Advanced Transportation*, vol. 2023, p. 2 761 858, Sep. 2023. DOI: 10.1155/2023/2761858.

6. Y. Jiang, F. Zhu, Q. Gu, Y. Wu, X. Wen, and **Z. Yao***, "Influence of CAVs platoon characteristics on fundamental diagram of mixed traffic flow," *Physica A: Statistical Mechanics and its Applications*, vol. 624, p. 128 906, Aug. 2023. DOI: 10.1016/j.physa.2023.128906.

7. Y. Jiang, Y. Ma, G. Xiao, Y. Wu, B. Ran, and **Z. Yao***, "A capacity model of signalized intersection with dedicated lanes for automated vehicles," *Transportation Letters: the International Journal of Transportation Research*, pp. 1–15, Jul. 2023. DOI: 10.1080/19427867.2023.2236852.

8. **Z. Yao***, Y. Wu, Y. Jiang*, and B. Ran, "Modeling the fundamental diagram of mixed traffic flow with dedicated lanes for connected automated vehicles," *IEEE Transactions on Intelligent Transportation Systems*, vol. 24, no. 6, pp. 6517–6529, Jun. 2023. DOI: 10.1109/TITS.2022.3219836.

9. **Z. Yao**, H. Deng, Y. Wu*, B. Zhao, G. Li, and Y. Jiang, "Optimal lane-changing trajectory planning for autonomous vehicles considering energy consumption," *Expert Systems with Applications*, vol. 225, no. 2, p. 120 133, Apr. 2023. DOI: 10.1016/j.eswa.2023.120133.

10. H. Jiang, **Z. Yao***, Y. Jiang*, and Z. He, "Is all-direction turn lane a good choice for autonomous intersections? a study of method development and comparisons," *IEEE Transactions on Vehicular Technology*, vol. 72, no. 7, pp. 8510–8525, Mar. 2023. DOI: 10.1109/TVT.2023.3250957.

11. **Z. Yao***, Y. Wu, Y. Wang, B. Zhao, and Y. Jiang, "Analysis of the impact of maximum platoon size of CAVs on mixed traffic flow: An analytical and simulation method," *Transportation Research Part C: Emerging Technologies*, vol. 147, p. 103 989, Feb. 2023. DOI: 10.1016/j.trc.2022.103989.

12. Y. Jiang, T. Ren, Y. Ma, Y. Wu, and **Z. Yao***, "Traffic safety evaluation of mixed traffic flow considering the maximum platoon size of connected automated vehicles," *Physica A: Statistical Mechanics and its Applications*, vol. 612, p. 128 452, Feb. 2023. DOI: 10.1016/j.physa.2023.128452.

13. **Z. Yao**, H. Jiang*, Y. Jiang*, and B. Ran, "A two-stage optimization method for schedule and trajectory of CAVs at an isolated autonomous intersection," *IEEE Transactions on Intelligent Transportation Systems*, vol. 24, no. 3, pp. 3263–3281, Jan. 2023. DOI: 10.1109/TITS.2022.3230682.

14. R. Li, S. Sun, Y. Wu*, H. Hao, X. Wen, and **Z. Yao**, "Fundamental diagram of mixed traffic flow considering time lags, platooning intensity, and the degradation of connected automated vehicles," *Physica A: Statistical Mechanics and its Applications*, vol. 627, p. 128 557, Oct. 2023. DOI: 10.1016/j.physa.2023.129130.

15. Y. Jiang, F. Zhu, **Z. Yao***, Q. Gu, and B. Ran, "Platoon intensity of connected automated vehicles: Definition, formulas, examples, and applications," *Journal of Advanced Transportation*, vol. 2023, p. 3 325 530, Apr. 18, 2023. DOI: 10.1155/2023/3325530.

16. **Z. Yao***, H. Jiang, Y. Cheng, Y. Jiang, and B. Ran, "Integrated schedule and trajectory optimization for connected automated vehicles in a conflict zone," *IEEE Transactions on Intelligent Transportation Systems*, vol. 23, no. 3, pp. 1841–1851, Mar. 2022. DOI: 10.1109/TITS.2020.3027731.

17. S. Chen, L. Hu*, **Z. Yao**, J. Zhu, B. Zhao, and Y. Jiang, "Efficient and environmentally friendly operation of intermittent dedicated lanes for connected autonomous vehicles in mixed traffic environments," *Physica A: Statistical Mechanics and its Applications*, vol. 608, p. 128 310, Dec. 2022. DOI: 10.1016/j.physa.2022.128310.

18. L. Shen, J. Liu*, **Z. Yao***, W. Wu, and H. Yang, "CTM-based traffic signal optimization of mixed traffic flow with connected automated vehicles and human-driven vehicles," *Physica A: Statistical Mechanics and its Applications*, vol. 603, p. 127 725, Oct. 2022. DOI: 10.1016/j.physa.2022.127725.

19. **Z. Yao**, Q. Gu, Y. Jiang*, and B. Ran, "Fundamental diagram and stability of mixed traffic flow considering platoon size and intensity of connected automated vehicles," *Physica A: Statistical Mechanics and its Applications*, vol. 604, p. 127 857, Nov. 2022. DOI: 10.1016/j.physa.2022.127857.

20. **Z. Yao***, M. Liu, Y. Jiang, Y. Tang, and B. Ran, "Trajectory reconstruction for mixed traffic flow with regular, connected, and connected automated vehicles on freeway," itr2.12294, Oct. 14, 2022. DOI: 10.1049/itr2.12294.

21 L. Shen, J. Liu*, **Z. Yao***, W. Wu, and H. Yang, "A new queue shock wave theory based on platoon dispersion modeling," *Physica A: Statistical Mechanics and its Applications*, vol. 603, p. 127 725, 2022. DOI: 10.1016/j.physa.2022.127725.

22 R. Luo, Q. Gu, T. Xu, H. Hao, and **Z. Yao***, "Analysis of linear internal stability for mixed traffic flow of connected and automated vehicles considering multiple influencing factors," *Physica A: Statistical Mechanics and its Applications*, vol. 597, p. 127 211, Jul. 2022. DOI: 10.1016/j.physa.2022.127211.

23 Y. Wu, Y. Lin, R. Hu, Z. Wang, B. Zhao, and **Z. Yao***, "Modeling and simulation of traffic congestion for mixed traffic flow with connected automated vehicles: A cell transmission model approach," *Journal of Advanced Transportation*, vol. 2022, p. 8 348 726, Jun. 27, 2022. DOI: 10.1155/2022/8348726.

24 B. Zhao, Y. Lin, H. Hao, and **Z. Yao***, "Fuel consumption and traffic emissions evaluation of mixed traffic flow with connected automated vehicles at multiple traffic scenarios," *Journal of Advanced Transportation*, vol. 2022, p. 6 345 404, Jan. 12, 2022. DOI: 10.1155/2022/6345404.

25 Y. Jin, **Z. Yao***, J. Han, L. Hu, and Y. Jiang, "Variable cell transmission model for mixed traffic flow with connected automated vehicles and human-driven vehicles," *Journal of Advanced Transportation*, vol. 2022, p. 6 342 857, Jan. 2022. DOI: 10.1155/2022/6342857.

26 B. Liu, Y. Cen, **Z. Yao***, X. Song, L. Hongben, and H. Gao, "Combined safety and coordination of connected automated vehicles in merging area with featuring optimal merging positions," *Journal of Advanced Transportation*, vol. 2022, p. 2 087 510, Sep. 2022. DOI: 10.1155/2022/2087510.

27 **Z. Yao**, Y. Wang, B. Liu*, B. Zhao, and Y. Jiang, "Fuel consumption and transportation emissions evaluation of mixed traffic flow with connected automated vehicles and human-driven vehicles on expressway," *Energy*, vol. 230, p. 120 766, Sep. 2021. DOI: 10.1016/j.energy.2021.120766.

28 **Z. Yao***, T. Xu, Y. Jiang, and R. Hu, "Linear stability analysis of heterogeneous traffic flow considering degradations of connected automated vehicles and reaction time," *Physica A: Statistical Mechanics and its Applications*, vol. 561, p. 125 218, Jan. 2021. DOI: 10.1016/j.physa.2020.125218.

29 Y. Jiang, S. Wang, **Z. Yao***, B. Zhao, and Y. Wang, "A cellular automata model for mixed traffic flow considering the driving behavior of connected automated vehicle platoons," *Physica A: Statistical Mechanics and its Applications*, vol. 582, p. 126 262, Nov. 2021. DOI: 10.1016/j.physa.2021.126262.

30 Y. Wang, **Z. Yao***, Y. Cheng, Y. Jiang, and B. Ran, "Kalman filtering method for real-time queue length estimation in a connected vehicle environment," *Transportation Research Record: Journal of the Transportation Research Board*, vol. 2675, no. 10, pp. 578–589, Oct. 2021. DOI: 10.1177/03611981211011996.

31 Y. Jiang, B. Zhao, M. Liu, and **Z. Yao***, "A two-level model for traffic signal timing and trajectories planning of multiple CAVs in a random environment," *Journal of Advanced Transportation*, vol. 2021, p. 9 945 398, Apr. 26, 2021. DOI: 10.1155/2021/9945398.

32 **Z. Yao**, L. Shen*, R. Liu, Y. Jiang, and X. Yang, "A dynamic predictive traffic signal control framework in a cross-sectional vehicle infrastructure integration environment," *IEEE Transactions on Intelligent Transportation Systems*, vol. 21, no. 4, pp. 1455–1466, Apr. 2020. DOI: 10.1109/TITS.2019.2909390.

33 **Z. Yao**, Y. Jiang*, B. Zhao, X. Luo, and B. Peng, "A dynamic optimization method for adaptive signal control in a connected vehicle environment," *Journal of Intelligent Transportation Systems: Technology, Planning, and Operations*, vol. 24, no. 2, pp. 184–200, Mar. 3, 2020. DOI: 10.1080/15472450.2019.1643723.

34 **Z. Yao***, R. Hu, Y. Jiang, and T. Xu, "Stability and safety evaluation of mixed traffic flow with connected automated vehicles on expressways," *Journal of Safety Research*, vol. 75, pp. 262–274, Dec. 2020. DOI: 10.1016/j.jsr.2020.09.012.

35 **Z. Yao***, B. Zhao, T. Yuan*, H. Jiang, and Y. Jiang, "Reducing gasoline consumption in mixed connected automated vehicles environment: A joint optimization framework for traffic signals and vehicle

trajectory," *Journal of Cleaner Production*, vol. 265, p. 121 836, Aug. 2020. DOI: 10.1016/j.jclepro.2020.121836.

36 **Z. Yao**, B. Zhao, L. Qin, Y. Jiang*, B. Ran, and B. Peng, "An efficient heterogeneous platoon dispersion model for real-time traffic signal control," *Physica A: Statistical Mechanics and its Applications*, vol. 539, p. 122 982, Feb. 2020. DOI: 10.1016/j.physa.2019.122982.

37 L. Yang, Y. Wang, and **Z. Yao***, "A new vehicle arrival prediction model for adaptive signal control in a connected vehicle environment," *IEEE Access*, vol. 8, pp. 112 104–112 112, Apr. 2020. DOI: 10.1109/ACCESS.2020.3002943.

38 L. Shen, R. Liu, **Z. Yao***, W. Wu, and H. Yang, "Development of dynamic platoon dispersion models for predictive traffic signal control," *IEEE Transactions on Intelligent Transportation Systems*, vol. 20, no. 2, pp. 431–440, Feb. 2019. DOI: 10.1109/TITS.2018.2815182.

39 **Z. Yao**, R. Hu, Y. Wang, Y. Jiang, B. Ran, and Y. Chen*, "Stability analysis and the fundamental diagram for mixed connected automated and human-driven vehicles," *Physica A: Statistical Mechanics and its Applications*, vol. 533, p. 121 931, Nov. 2019. DOI: 10.1016/j.physa.2019.121931.

40 **Z. Yao**, T. Xu, Y. Cheng, L. Qin, Y. Jiang, and B. Ran, "Dynamic platoon dispersion model based on real-time link travel time," *IET Intelligent Transport Systems*, vol. 13, no. 11, pp. 1694–1700, Nov. 2019. DOI: 10.1049/iet-its.2019.0098.

41 X. Luo, Y. Jiang*, **Z. Yao**, Y. Tang, and Y. Liu, "Designing limited-stop transit service with fixed fleet size in peak hours by exploiting transit data," *Transportation Research Record Journal of the Transportation Research Board*, vol. 2647, no. 1, pp. 134–141, Oct. 2017. DOI: 10.3141/2647-16.

42 Y. Jiang, **Z. Yao***, X. Luo, W. Wu*, X. Ding, and A. Khattak, "Heterogeneous platoon flow dispersion model based on truncated mixed simplified phase-type distribution of travel speed," *Journal of Advanced Transportation*, vol. 50, no. 8, pp. 2160–2173, Dec. 2016. DOI: 10.1002/atr.1452.

PRESENTATIONS

1 **Z. Yao**, Y. Zhao, H. Jiang, and Y. Wu, "A queueing model and capacity analysis for reservation-based autonomous intersection," in *Transportation Research Board 103nd Annual Meeting*, 2024.

2 **Z. Yao**, L. Li, Y. Wang, and Y. Wu, "Joint optimization of management strategy and the number of dedicated lanes of connected automated vehicles on highways," in *Transportation Research Board 103nd Annual Meeting*, 2024.

3 H. Jiang, **Z. Yao**, Y. Zhang, and Y. Jiang, "Automated pedestrian shuttle service for safety crossing at unsignalized intersections: A space-time network modeling approach," in *Transportation Research Board 103nd Annual Meeting*, 2024.

4 Y. Jiang, L. Tan, G. Xiao, Y. Ma, and **Z. Yao**, "Cooperative formation lane-changing strategy for connected automated vehicles in mixed traffic flow," in *Transportation Research Board 103nd Annual Meeting*, 2024.

5 Y. Jiang, Y. Ma, T. Ren, H. Li, and **Z. Yao**, "Analyzing the effect of the platoon size of connected vehicles on traffic capacity of mixed traffic flow," in *Transportation Research Board 103nd Annual Meeting*, 2024.

6 T. Ren, Y. Wang, Z. Xu, and **Z. Yao**, "Fundamental diagram of mixed traffic flow considering dedicated and shared lanes management policies for CAVs," in *Transportation Research Board 103nd Annual Meeting*, 2024.

7 Y. Jiang, F. Zhu, Q. Gu, Y. Wu, and **Z. Yao**, "Influence of CAVs platoon characteristics on fundamental diagram and stability under mixed traffic flow," in *Transportation Research Board 103nd Annual Meeting*, 2024.

8. Y. Jiang, H. Cong, Y. Wang, H. Li, and **Z. Yao**, "A new control strategy of CAVs platoon for mitigating traffic oscillation in a two-lane highway," in *Transportation Research Board 103nd Annual Meeting*, 2024.
9. **Z. Yao**, "Minimization of fuel consumption for lane-changing trajectory of connected automated vehicles," in *Transportation Research Board 102nd Annual Meeting*, 2023.
10. Y. Jiang, T. Ren, S. Wang, and **Z. Yao**, "Platoon-aware multi-lane cellular automata model for mixed traffic flow with connected automated vehicles," in *Transportation Research Board 102nd Annual Meeting*, 2023.
11. Y. Jiang, T. Ren, **Z. Yao**, and Y. Ma, "Safety analysis of the effect of maximum platoon size of connected automated vehicles," in *Transportation Research Board 102nd Annual Meeting*, 2023.
12. H. Jiang, **Z. Yao**, and Y. Jiang, "A two-stage optimization method for schedule and trajectory of cavs at an isolated autonomous intersection," in *Transportation Research Board 102nd Annual Meeting*, 2023.
13. H. Jiang, **Z. Yao**, and Y. Jiang, "Is all-direction turn lane a good choice for autonomous intersections? a study of method development and comparisons," in *Transportation Research Board 102nd Annual Meeting*, 2023.
14. H. Hao, **Z. Yao**, and Y. Jiang, "Fundamental diagram of mixed traffic flow considering cavs degradation, time lags, and platooning intensity," in *Transportation Research Board 102nd Annual Meeting*, 2023.
15. Q. Gu, **Z. Yao**, and Y. Jiang, "Fundamental diagram and stability of mixed traffic flow considering platoon size and intensity of connected automated vehicles," in *Transportation Research Board 102nd Annual Meeting*, 2023.
16. Y. Jiang, Y. Ma, **Z. Yao**, and F. Zhu, "A capacity model of signalized intersection with dedicated lanes for automated vehicles," in *Transportation Research Board 102nd Annual Meeting*, 2023.
17. H. Jiang, **Z. Yao**, and Y. Jiang, "Virtual platoon–based vehicle schedule optimization model for autonomous intersections," in *Transportation Research Board 101st Annual Meeting*, 2022.
18. **Z. Yao**, "Integrated schedule and trajectory optimization for connected automated vehicles in a conflict zone," in *2021 Symposium on Intelligent Simulation Optimization and Scheduling*, 2021.
19. **Z. Yao**, S. Wang, M. Liu, Y. Jiang, and B. Ran, "A two-level model for traffic signal timing and trajectories planning of multiple connected automated vehicles in a random environment," in *Transportation Research Board 100th Annual Meeting*, 2021.
20. **Z. Yao**, K. Gao, Y. Cheng, B. Ran, and M. Liu, "A kalman filtering method for real-time queue length estimation in a connected vehicle environment," in *Transportation Research Board 100th Annual Meeting*, 2021.
21. **Z. Yao**, M. Liu, T. Xu, R. Hu, and Y. Jiang, "Stability analysis of heterogeneous traffic flow considering degradations of connected automated vehicles and time delays," in *Transportation Research Board 100th Annual Meeting*, 2021.
22. **Z. Yao**, "Traffic signal timing based on vehicle trajectories data," in *2018DiDi-IEEE Elite Forum*, 2018.
23. **Z. Yao**, "Development of dynamic platoon dispersion models for predictive traffic signal control," in *2018DiDi-IEEE Elite Forum*, 2018.
24. **Z. Yao**, Y. Jiang, X. Luo, and X. Ding, "Dynamic traffic flow prediction model for real-time adaptive signal control in vehicle infrastructure integration environment," in *Transportation Research Board 96th Annual Meeting*, 2017.
25. **Z. Yao**, P. Han, B. Zhao, Y. Jiang, B. Liu, and M. Du, "High-granularity dynamic traffic flow prediction model based on artificial neural network," in *Transportation Research Board 96th Annual Meeting*, 2017.
26. X. Luo, Y. Jiang, **Z. Yao**, Y. Tang, and Y. Liu, "Limited-stop transit service designing with fixed fleet size in peak hours by exploiting transit data," in *Transportation Research Board 96th Annual Meeting*, 2017.

27 H. Yang, L. Shen, Y. Xiang, **Z. Yao**, and X. Liu, "Freeway incident duration prediction using bayesian network," in *International Conference on Transportation Information and Safety*, 2017.

28 Y. Jiang, **Z. Yao**, X. Ding, and X. Luo, "Mixed platoon flow dispersion model based on truncated mixed phase distribution of speed," in *Transportation Research Board 95th Annual Meeting*, 2016.

PROJECTS

- Jan 2021 – Dec 2023 — "Collaborative Control Optimization of Mixed Platoon and Traffic Signals at Intersection in Non-fully Connected Automated Vehicle Environment", *National Natural Science Foundation of China*, No. 52002339, CNY 240,000, Principal Investigator
- Jan 2024 – Dec 2025 — " Trajectories Reconstruction and Analysis of Traffic Congestion Situation at Urban Intersections in a Vehicle Infrastructure Integration Environment", *Intelligent Policing Key Laboratory of Sichuan Province*, No. ZNJW2024KFQN001, CNY 100,000, Principal Investigator
- Sep 2023 – Sep 2024 — " Research and Suggestions on the Current Development Status of the Vehicle Infrastructure Integration Autonomous Driving Industry in Chengdu ", *Chengdu Soft Science Research Project*, No. 2023-RK00-00029-ZF, CNY 50,000, Principal Investigator
- Apr 2021 – Mar 2023 — "Fully Sampled Trajectory Reconstruction and Traffic State Estimation for Mixed Traffic Flow Mixed in Connected Automated Vehicle Environment", *Natural Science Foundation of Sichuan Province*, No. 2021YJ0535, CNY 100,000, Principal Investigator
- May 2023 – May 2025 — "Coordination Optimization and Control of Connected Automated Vehicles and Intersection Spatiotemporal Resource in Vehicle Infrastructure Integration Environment", *Fundamental Research Funds for the Central Universities*, No. 2682023ZTPY034, CNY 100,000, Principal Investigator
- Dec 2020 – Dec 2022 — "Stability and Fundamental Diagram of Mixed Traffic Flow of Connected Automated Vehicles Considering Time Delay", *Fundamental Research Funds for the Central Universities*, No. 2682022CX028, CNY 100,000, Principal Investigator
- Oct 2020 – Sep 2021 — "Intelligent Traffic Signal Control Optimization and Visualization Platform", *Innovation Center Project of Chengdu Jiaoda Bigdata Technology Co., Ltd.*, No. JD-SKCXZX202003, CNY 150,000, Principal Investigator

PROFESSIONAL SERVICES

Editors

- IEEE Transactions on Vehicular Technology, Associate Editor
- Journal of Transportation and Information, Editorial Board Member
- Sustainable Horizons, Early Career Editorial Board Member
- PLOS ONE, Academic Editor
- Journal of Advanced Transportation, Academic Editor
- Mathematical Problems in Engineering, Academic Editor
- Scientific Programming, Academic Editor
- SAE International, Handling Editor

PROFESSIONAL SERVICES (continued)

Guest editors

- Special issue "Management and Control Methods of Mixed Traffic Flow with Connected Automated Vehicles" in the *Journal of Advanced Transportation*
- Special issue "Connected Automated Vehicles Transportation" in the *Journal of Transportation and Information*

Reviewers

- Accident Analysis and Prevention
- ACM Transactions on Intelligent Systems and Technology
- Advanced Intelligent Systems
- Applied Mathematical Modelling
- Case Studies on Transport Policy
- China Journal of Highway and Transport
- CICTP
- Cogent Engineering
- Computer Networks
- Control Engineering Practice
- Electronics
- Energy Policy
- Engineering Applications of Artificial Intelligence
- Engineering Computations
- Expert Systems With Applications
- Future Generation Computer Systems
- Future Transportation
- Heliyon
- IEEE Access
- IEEE Internet of Things Journal
- IEEE Open Journal of Intelligent Transportation Systems
- IEEE Transactions on Artificial Intelligence
- IEEE Transactions on Consumer Electronics
- IEEE Transactions on Intelligent Transportation Systems
- IEEE Transactions on Intelligent Vehicles
- IEEE Transactions on Transportation Electrification
- IEEE Transactions on Vehicular Technology
- IET Intelligent Transport Systems
- Information Fusion
- International Journal of Environmental Research and Public Health
- International Journal of Intelligent Transportation Systems Research
- International Journal Of Pattern Recognition And Artificial Intelligence
- Journal of Advanced Transportation
- Journal of Beijing Jiaotong University
- Journal of Chongqing Jiaotong University

PROFESSIONAL SERVICES (continued)

- Journal of Cleaner Production
- Journal of Computer Science Research
- Journal of Intelligent & Fuzzy Systems
- Journal of Intelligent Transportation Systems
- Journal of Jilin University
- Journal of Public Transportation
- Journal of Traffic and Transportation Engineering (English Edition)
- Journal of Tsinghua University
- Kybernetes
- Transportation Safety and Environment
- Physica A: Statistical Mechanics and its Applications
- PLOS ONE
- Process Safety and Environmental Protection
- Reliability Engineering & System Safety
- Scientia Iranica
- Scientific Programming
- Sensors
- Simulation Modelling Practice and Theory
- Sustainability
- Sustainable Cities and Society
- Symmetry
- Transportation Engineering
- Transportation Letters: the International Journal of Transportation Research
- Transport Policy
- Transportation Research Part A: Policy and Practice
- Transportation Research Part C: Emerging Technologies
- Transportation Research Part D: Transport and Environment
- Transportation Research Part E: Logistics and Transportation Review
- Transportation Research Part F: Traffic Psychology and Behaviour
- Transportation Research Interdisciplinary Perspectives
- Transportation Research Record
- Transportmetrica A: Transport Science
- Transportmetrica B: Transport Dynamics

HONORS & CERTIFICATES

2022 — *Reviewer of Outstanding Contribution in 2022* for the Journal of Jilin University(Engineering and Technology Edition))

2021 — *Reviewer of Outstanding Contribution in 2021* for the China Journal of Highway and Transport)

2020 — **Outstanding Doctoral Dissertation Award**, Southwest Jiaotong University

2019 — **Outstanding Paper Award**, World Transport Convention

2018 — **First Prize (1.4%)**, National Post-Graduate Mathematical Contest in Modeling

HONORS & CERTIFICATES (continued)

- **National Scholarship (Ph.D.) (No.1 and 3%)**, Ministry of Education of the People's Republic of China
- **First Prize of Scholarship (No.1 and 3%)**, Southwest Jiaotong University

2017
- **National Scholarship (Ph.D.) (No.1 and 3%)**, Ministry of Education of the People's Republic of China
- **First Prize of Scholarship (No.1 and 3%)**, Southwest Jiaotong University

2016
- **National Scholarship (Ph.D.) (No.1 and 3%)**, Ministry of Education of the People's Republic of China
- **First Prize of Scholarship (No.1 and 3%)**, Southwest Jiaotong University
- **Second Prize**, National Post-Graduate Mathematical Contest in Modeling

2015
- **Second Prize**, National Post-Graduate Mathematical Contest in Modeling

2014
- **Outstanding Graduates Awards (1%)**, Sichuan Provincial Department of Education

2013
- **National Scholarship (B.S.) (No.1 and 3%)**, Ministry of Education of the People's Republic of China

2012
- **National Scholarship for Encouragement (B.S.) (3%)**, Ministry of Education of the People's Republic of China
- **First Prize (1.4%)**, National Graduate Mathematical Contest in Modeling

Skills

Language	Chinese, English
Programming	Proficient in: MATLTB, LINGO Familiar with: R, LaTEX, Python, VBA, C++, Java, JavaScript, Visual Basic
Modeling tools	Proficient in COPT, GPOPS, SUMO, Vissim, Synchro Familiar with: Gurobi, CPLEX, TransCAD, SPSS
Algorithms	Proficient in: Dynamic programming (DP), Genetic algorithm (GA) Familiar with: Lagrangian relaxation (RL), Alternating Direction Method of Multipliers (ADMM)