

Zhibin Chen

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Engineering and Computer Science
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Research Interests

- Network Modeling & Optimization
- Intelligent Transportation Systems
- Discrete Optimization

Education

08/2013–05/2017 Ph.D., Transportation Engineering, University of Florida, U.S., Advisor: Prof. Yafeng Yin
09/2008–07/2012 B.E., Transportation Engineering, Sun Yat-sen University, China

Honors & Awards

01/2022 Outstanding Reviewer, Transportation Research Part D
01/2022 Best Paper Award at The 13rd International Workshop on Computational Transportation Science (CTS2022)
12/2021 Outstanding Presentation Award at The 20-21st COTA International Conference of Transportation Professionals
06/2021 The Second Prize of Excellent Paper at The 4th Academic Conference on Intelligent Optimization and Scheduling
02/2021 Shanghai Overseas Talents (XSC) Program
02/2021 Shanghai Eastern Scholar Program (Young Scholar Scheme)
11/2020 Shanghai Pujiang Talent Program
07/2016 Ryuichi Kitamura Paper Award at 95th TRB Annual Meeting
07/2016 Stella Dafermos Best Paper Award at 95th TRB Annual Meeting
08/2013 Graduate School Fellowship, University of Florida

Working Experience

01/2019-Present Assistant Professor, Division of Engineering and Computer Science, New York University Shanghai
01/2020-Present Global Network Assistant Professor, New York University
01/2019-12/2019 Research Assistant Professor, New York University
05/2017-12/2018 Research Fellow, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor

Teaching Activities

Spring 2021, 2022 DATS-SHU 240, Introduction to Optimization and Mathematical Programming
Fall 2019, 2020 CENG-SHU 352, Emerging Technologies for Smart Cities
Spring 2019, 2020 CSCI-SHU 240, Introduction to Optimization and Mathematical Programming

Service Activities

02/2020-Present	Editorial Advisory Board Member, Transportation Research Part C
05/2020-Present	Editorial Advisory Board Member, Frontiers in Future Transportation
08/2017-Present	Technical Committee Member, World Transport Convention
09/2019-Present	Committee Member, Young Scholars Forum of Traffic Engineering and Management
03/2015-Present	Reviewer: Transportation Research Part A-E, Transportation Science, POM, IEEE Transactions on Intelligent Transportation Systems, IEEE Transactions on Automation Science and Engineering, Networks and Spatial Economics, etc.

Refereed Journal Publications

1. Liu, Y., **Chen, Z.***, Xie, C., and Liu, K., 2023. Temporal Equilibrium for Electrified Ride-Sourcing Markets Considering Charging Capacity Constraint and Driving Fatigue. *Transportation Research Part C*, 147, 104008.
2. Bao, Z., Li, J., Bai, X., Xie, C., **Chen, Z.**, Xu, M., Shang, W., and Li, H., 2023. An Optimal Charging Scheduling Model and Algorithm for Electric Buses. *Applied Energy*, 332, 120512.
3. Liu, Y., **Chen, Z.***, Gong, S., and Liu, H., 2022. Reducing Congestion and Emissions via Optimal Deployment of Roadside Units under Mixed Traffic Flow. *International Journal of Coal Science & Technology*, 10(1), 1-15.
4. Liu, Z., **Chen, Z.***, Yin, Y., and Xu, Z., 2022. Regulatory Policies to Electrify Ridesourcing Systems. *Transportation Research Part C*, 141, 103743.
5. Li, Y., Ma, Y., **Chen, Z.**, 2022. How can Connected and Automated Vehicles Improve Merging Efficiency at Freeway On-Ramps? *Transportmetrica A: Transport Science*, 1-27.
6. Cai, Z., Guan, C., Trinh, A., Zhang, B., **Chen, Z.**, Srinivasan, S., and Nielsen, C., 2022. Satisfactions on Self-Perceived Health of Urban Residents in Chengdu, China: Gender, Age and the Built Environment. *Sustainability*, 14, 13389.
7. Xu, Z., **Chen, Z.**, Yin, Y., and Ye, J., 2021. Equilibrium Analysis of Urban Traffic Networks with Ride-Sourcing Services. *Transportation Science*, 55(6), 1260-1279.
8. Liu, Z., **Chen, Z.**, He, Y., and Song, Z., 2021. Network User Equilibrium Problems with Infrastructure-Enabled Autonomy. *Transportation Research Part B*, 154, 207-241.
9. Bai, M., Zhong, S., Yan, P., **Chen, Z.**, and Zhang, Z., 2021. A Data-Driven Near-Optimization Approach for Smart Parking Management Platforms. In *2021 IEEE International Conference on Networking, Sensing and Control (ICNSC) (Vol. 1, pp. 1-6)*. IEEE.
10. Chi, X., **Chen, Z.**, Cheong, T., Lu, Q., 2021. Mitigating the Spread of Epidemics by Managing and Controlling Urban Transportation Systems and Travel Activities. *Journal of Transportation Engineering and Information*, 19(1). (Chinese Journal)
11. Sun, X., **Chen, Z.**, and Yin, Y., 2020. Integrated Planning of Dynamic and Static Charging Infrastructures for Electric Vehicles. *Transportation Research Part D*, 83, 102331.
12. Zhong, R., Xu, R., Sumalee, A., Ou, S., and **Chen, Z.***, 2020. Pricing Environmental Externality in Traffic Network Mixed with Fuel Vehicles and Electric Vehicles. *IEEE Transactions on Intelligent Transportation Systems*, 22(9), 5535-5554.
13. Li, Y., **Chen, Z.**, Yin, Y., and Peeta, S., 2020. Deployment of Roadside Units to Overcome Connectivity Gap in Transportation Networks with Mixed Traffic. *Transportation Research Part C*, 111, 496-512.
14. **Chen, Z.**, Lin, X., Yin, Y., and Li, M., 2020. Path Controlling of Automated Vehicles for System Optimum on Transportation Networks with Heterogeneous Traffic Stream. *Transportation Research Part C*, 110, 312-329.
15. Miralinaghi, M., Woldemariam, W., Abraham, D., Chen, S., Labi, S., and **Chen, Z.**, 2020. Network-Level Scheduling of Construction Projects Considering User and Business Impacts. *Computer-Aided Civil and Infrastructure Engineering*.
16. Luo, Q., Saigal, R., **Chen, Z.**, and Yin, Y., 2019. Accelerating the Adoption of Automated Vehicles by Subsidies: A Dynamic Games Approach. *Transportation Research Part B*, 129, 226-243.
17. **Chen, Z.***, Spana, S., and Yin, Y., 2019. An Advanced Parking Navigation System for Downtown Parking. *Networks and Spatial Economics*, 1-16.

18. **Chen, Z.**, Yin, Y., and Song, Z., 2018. A Cost-Competitiveness Analysis of Charging Infrastructure for Electric Bus Operations. *Transportation Research Part C*, 93, 351-366.
19. de Andrade, G. R., **Chen, Z.***, Elefteriadou, L., and Yin, Y., 2017. Multiclass Traffic Assignment Problem with Flow-Dependent Passenger Car Equivalent (PCE) Value of Trucks. *Transportation Research Record*, 2667, 131-141.
20. **Chen, Z.**, Liu, W., and Yin, Y., 2017. Deployment of Stationary and Dynamic Charging Infrastructure for Electric Vehicles along Traffic Corridors. *Transportation Research Part C*, 77, 185-206.
21. **Chen, Z.**, He, F., Yin, Y., and Du, Y., 2017. Optimal Design of Autonomous Vehicle Zones in Transportation Networks. *Transportation Research Part B*, 99, 44-61.
22. **Chen, Z.**, He, F., and Yin, Y., 2016. Optimal Deployment of Charging Lanes for Electric Vehicles in Transportation Networks. *Transportation Research Part B*, 91, 344-365.
23. **Chen, Z.**, He, F., Zhang, L., and Yin, Y., 2016. Optimal Deployment of Autonomous Vehicle Lanes with Endogenous Market Penetration. *Transportation Research Part C*, 72, 143-156.
24. **Chen, Z.**, Xu, Z., Zangui, M., and Yin, Y., 2016. Analysis of Advanced Management of Curbside Parking. *Transportation Research Record*, 2567, 57-66. (Ryuichi Kitamura Best Paper Award & Stella Dafermos Best Paper Award)
25. **Chen, Z.**, Yin, Y., He, F., and Lin, J. L., 2015. Parking Reservation for Managing Downtown Curbside Parking. *Transportation Research Record*, 2498, 12-18.
26. He, F., Yin, Y., **Chen, Z.**, and Zhou, J., 2015. Pricing of Parking Games with Atomic Players. *Transportation Research Part B*, 73, 1-12.
27. **Chen, Z.**, Cai, M., Li, F., and Ye, W., 2014. Dynamic Simulation of Traffic Noise by Applying Ray Tracing Method based on Indoor Space Partitioning. *Acta Acustica united with Acustica*, 100(3), 467-476.

Manuscripts in Submission

1. Li, Z., Xu, Z., **Chen, Z.***, Chen, G., Xie, C., and Zhong, M., 2022. Empirical Analysis of Electric Vehicles' Charging Patterns: Case Study from Shanghai. *Transportation Research Part D*.
2. **Chen, Z.**, Deng, Y., Xie, C., Guan, C., and Pan, T., 2022. Network Equilibrium of Battery Electric Vehicles Considering Drivers' Resting Behavior. *Transportation Research Part C*.
3. Deng, Y., **Chen, Z.***, Yan, P., and Zhong, R., 2022. The Optimal Design of A Battery Swapping and Charging Management System for Electric Trucks considering Battery Degradation. *IEEE Transactions on Intelligent Transportation Systems*.
4. Yan, P., Bai, M., Cai, X., and **Chen, Z.***, 2022. A Data-driven Approximation Approach for Revenue Management of Real-Time Parking Reservation Systems. *IIEE Transactions*.
5. Yan, P., Yu, K., Zhao, X., and **Chen, Z.***, 2022. An Online Reinforcement Learning Approach to Charging and Order-Dispatching Optimization for An E-hailing Electric Vehicle Fleet. *European Journal of Operational Research*.
6. Liang, Q., Li, X., **Chen, Z.**, Pan, T., and Zhong, R., 2022. Day-to-Day Traffic Control for Networks Mixed with Regular Human-Piloted and Connected Autonomous Vehicles. *Transportation Research Part B*.

Working Papers

1. Hao, Y., **Chen, Z.***, and Jin, J., 2022. Itinerary Planning for Semi-Auto Truck Platooning. To be submitted to *Transportation Research Part D*.
2. Liu, Y., **Chen, Z.***, and Chow, J., 2022. Robust Location for Quarantine Facilities under Decentralized Assignment.

* Corresponding Author

Patents

1. **A Sound Line Tracing Method based Interior Subdivision**, CN102589676 B, China.

Refereed Conference Proceedings

1. **Chen, Z.**, Yin, Y., Zangui, M., and Francis, C., 2016. Identification and Selection of Managed Lane Strategies on Arterials. *Transportation Research Board 95th Annual Meeting* (No. 16-1345).