XIAOPENG (SHAW) LI

Associate Professor, Susan A. Bracken Faculty Fellow
Director, National Center for Congestion Reduction (NICR)
Founder, Connected and Autonomous Transportation Systems Lab (CATS; introduction at
https://www.youtube.com/watch?v=Gq2trkadsnc)
Department of Civil and Environmental Engineering, University of South Florida
4202 E. Fowler Avenue, ENG 207, Tampa, FL 33620-5350
Email: xiaopengli@usf.edu; Phone: 813-974-0778; Fax: 813-974-2957
Research Group Website: http://cee.eng.usf.edu/faculty/xiaopengli/
Facebook: https://www.facebook.com/USFCATS/
YouTube Channel: https://www.youtube.com/channel/UC373QJ-oemrgHekytE0dfvA/videos

EDUCATION

Ph.D. **University of Illinois at Urbana-Champaign (UIUC)**
Civil and Environmental Engineering, Spring 2011
Dissertation: *Reliable Facility Location Design and Traffic Sensor Deployment under Probabilistic Disruptions*
Advisor: Professor Yanfeng Ouyang
GPA: 3.98/4.00

M.S. **University of Illinois at Urbana-Champaign**
Applied Mathematics, December 2010
GPA: 4.00/4.00

M.S. **University of Illinois at Urbana-Champaign**
Civil and Environmental Engineering, 2006-2007
GPA: 4.00/4.00

B.Eng. **Tsinghua University**, Beijing, China
Civil Engineering, 2006
Minor: Computer Engineering
Thesis: *Application of Image Recognition to Pedestrian Traffic*

APPOINTMENTS

- Director, National Institute for Congestion Reduction (NICR), September 2020 - present
  - o NICR is one of the seven National University Transportation Centers Sponsored by US Department of Transportation. The consortium includes USF (lead), the University of California, Berkeley, Texas A&M University, and the University of Puerto Rico, Mayagüez. For more information, please refer to https://nicr.usf.edu/.
- Founder, Connected and Autonomous Transportation Systems (CATS) Lab, December 2018 – present
  - o CATS designed and assembled two L3 connected and automated vehicles (CAVs) and associated roadside units in house. The facilities for the first time demonstrated the US Department of Transportation (USDOT) CARMA platform to the public. CATS also developed the algorithms for the first set of use cases (4 TSMO use cases) for the CARMA ecosystems. See for an introduction https://www.youtube.com/watch?v=Gq2trkadsnc
- Associate Professor, Department of Civil and Environmental Engineering, University of South Florida (USF), August 2018 – present
- Assistant Professor, Department of Civil and Environmental Engineering, University of South Florida

(USF), August 2015 – August 2018
- Assistant Professor, Department of Civil and Environmental Engineering, Mississippi State University (MSU), January 2012 – August 2015
- Research Analyst, Champaign Simulation Center, Caterpillar Inc., Champaign IL, February - December 2011
- Graduate Research Assistant, Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, August 2006 – February 2011
- Graduate Teaching Assistant, Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, August 2008 – December 2010

HONORS AND AWARDS
- Journal of Transportation Engineering Part A 2020 Best Paper Award (Li as the Corresponding Author)
- USF Outstanding Research Achievement Award, September 2020
- USF College of Engineering Senior Outstanding Achievement Research Award, July 2020
- IEEE Transactions on Cybernetics, 2018 Outstanding Reviewer Award, January 2019
- Incentive Award, USF Research & Innovation, May 2017
- Susan A. Bracken Faculty Fellowship (first holder), University of South Florida, Nov 2016 – present.
- National Science Foundation Faculty Early Career Development Award (NSF CAREER), 2015
- MSU Nominee for Ralph E. Powe Junior Faculty Enhancement Award, Oak Ridge Associated Universities (ORAU), December 2013
- Best Doctoral Dissertation Presentation Award, Travel Analysis Section, the 90th Annual Meeting of the Transportation Research Board in DC, January 2011
- Dwight David Eisenhower Graduate Fellowship, Federal Highway Administration, USDOT, 2010
- Chester P. Siess Award for Scholarly Achievement and Promise for Research, UIUC, 2009
- Graduate School Conference Travel Award, UIUC, 2007
- UIUC Departmental Fellowship, 2006 – 2007
- Scholarship for Excellence in Study, Second Prize, Tsinghua University, 2004 – 2005
- Scholarship for Excellence in Study, Third Prize, Tsinghua University, 2003 – 2004
- China National Government Scholarship, Second Prize, China, 2002 – 2003

With Students
- Zhiwei Chen, Xiaowei Shi & Qianwen Li, Bronze Prize, 6th China International College Students 'Internet+' Innovation and Entrepreneurship Competition. Ministry of Education of the People's Republic of China, March 2021 (6.31 million participants, 1.47 million projects from 4,186 colleges in 117 countries and regions).
- Xiaowei Shi, Chinese Overseas Transportation Association (COTA) Research Lightning Talk Competition. Second prize. COTA, March 2021 (among 14 participants across 4 countries).
- Neville A. Parker – Science & Technology Award to Xiaowei Shi's Paper "Trajectory Planning for an Autonomous Vehicle with Conflict Moving Objects over a Fixed Path", Council of University Transportation Centers (CUTC), December 2020
- Charley Wootan Memorial – Masters Award to Zhiwei Chen's MS Thesis "Exploring the Equity Performance of Bike-Sharing Systems with Disaggregated Data: A Story of Southern Tampa", Council of University Transportation Centers (CUTC), December 2020
- Faculty Advisor for the Second Place Winner on the Airport Management and Planning Challenge of the Airport Cooperative Research Program (ACRP) University Design Competition, June 2020
- Faculty Advisor for a finalist team for 2019 Transportation Technology Tournament, Austin

TEACHING EXPERIENCE

- Instructor
  - CGN 6933, *Connected & Autonomous Vehicle* (a newly created split level course), USF, Spring 2020 - 2021
  - CGN 6933, *Connected & Autonomous Vehicle Seminars*, USF, Spring 2018 -2019
  - CGN 6933, *Transportation & Infrastructure network*, USF, Spring 2018, Spring 2019
  - TTE 4005, *Transportation Engineering II*, USF, Spring 2017
  - CGN 6933, *Traffic Flow Theory/ITS*, USF, Spring 2016, Fall 2018
  - TTE 6930, Graduate Transportation Seminar USF, Spring 2016
  - CE 8133, *Traffic Flow Theory*, MSU, Spring 2015
  - CE 4133, *Highway Geometric Design*, MSU, Fall 2014
  - CE 4163/6163, *Urban Transportation Planning*, MSU, Fall 2013
  - CE 4990/6990, *Freight Transportation Systems Analysis*, MSU, Fall 2012
  - CE 3113, *Transportation Engineering*, MSU, Spring 2012-2015
- Guest lecturer
  - TTE 4005, *Transportation Engineering II*, USF, Spring 2016
  - CE 1001, Introduction to Civil Engineering, MSU, Fall 2012
  - SO 4990/6990, Transportation and Society, MSU, Spring 2012
  - CEE 201, *Systems Engineering and Economics*, UIUC, Fall 2010
  - CEE 310, *Transportation Engineering*, UIUC, Fall 2009, Fall 2010
- CEE 512, *Logistics Systems Analysis*, UIUC, Spring 2008
- Teaching assistant
  - CEE 310, *Transportation Engineering*, UIUC, Fall 2008 – Fall 2009 (three times)
  - CEE 201, *Systems Engineering and Economics*, UIUC, Fall 2010
    (Led office hours and discussion sessions; prepared course materials and exam problems; graded homework and exams)
- Graduate mentor
  - NEXTRANS Center's Undergraduate Summer Intern Program, 2009
  - UIUC Summer Research Intern Program, 2009, 2010

RESEARCH INTERESTS

- Automated, connected, electric and shared (ACES) transportation systems analysis
- Connected automated vehicles (CAV) modeling and field experiments
- Modeling on interdependent infrastructure systems

CITATIONS

Google Scholar: https://scholar.google.com/citations?user=c_pXlGUAAAAJ&hl=en
Scopus: https://www.scopus.com/authid/detail.uri?authorId=57192545155#

JOURNAL ARTICLES (*Li as the corresponding author; _graduate, visiting and postdoctoral student; ⁓graduation committee and external advisees)

Published and Accepted

1. *Shi, X. & Li, X. (2021). Constructing fundamental diagram for traffic flow with automated vehicles: methodology and demonstration. **Transportation Research Part B**, 150, 219-292. https://doi.org/10.1016/j.trb.2021.06.011
2. *Chen, Z. & Li, X. A continuous model for designing corridor systems with modular autonomous vehicles enabling station-wise docking. **Transportation Science**, forthcoming.

3. *Shi, X. & Li, X. Operations design of modular vehicles on an oversaturated corridor with first-in-first-out passenger queueing. *Transportation Science*, forthcoming.

4. *Chen, Z. & Li, X. (2021). Designing corridor systems with modular autonomous vehicles enabling station-wise docking: Discrete modeling method. *Transportation Research Part E*, 152, 102388. https://doi.org/10.1016/j.tre.2021.102388 (also accepted for presentation at the **24th International Symposium on Transportation and Traffic Theory** ISTTT24).

5. *Yao, H. & Li, X. (2021). Lane-change-aware connected automated vehicle trajectory optimization at a signalized intersection with multi-lane roads. *Transportation Research Part C*, 129, 103182. https://doi.org/10.1016/j.trc.2021.103182

6. *Shi, X. & Li, X. (2021). Empirical study on car following characteristics of commercial automated vehicles with different headway settings. *Transportation Research Part C*, 128, 103134. https://doi.org/10.1016/j.trc.2021.103134

7. *Li, Q. & Li, X., Huang, Z., Halkias John, McHale, G., James, R. Simulation of mixed traffic with cooperative lane changes. *Computer-Aided Civil and Infrastructure Engineering*, forthcoming.

8. *Hu, Y. & Li, X. Modeling and analysis of excess commuting with trip chains. *Annals of the Association of American Geographers* (the flagship journal in Geography), forthcoming. https://doi.org/10.1080/24694452.2020.1835461

9. *Liu, H., Soleimaniamiri, S., Li, X., Xie, S. Joint location and assignment optimization for cooperation of multi-type fire vehicles. *Computer-aided Civil and Infrastructure Engineering*, forthcoming*.

10. *Shi, X. Wang, Z. & Li, X. The Effect of Ride Experience on Changing Opinions Toward Autonomous Vehicle Safety, *Communications in Transportation Research*, forthcoming

11. Gong, M., Hu, Y., Chen, Z. (corresponding author) & Li, X. Transfer-based customized bus system design with passenger-route assignment optimization. *Transportation Research Part E*, forthcoming.

12. Li, Q., Wang, Z., Li, M., Yang, R., Lin, P.S., Li, X. (2021). Development of Crash Modification Factors for Roadway Illuminance: A Matched Case-Control Study. *Accident Analysis and Prevention*, 159, 106279. https://doi.org/10.1016/j.aap.2021.106279

13. Chowdhury S., Shahvari, O., Marufuzzaman, M. (corresponding author), Li, X. & Bian, L. (2021) Drone Routing and Optimization for Post-Disaster Inspection. *Computers & Industrial Engineering*, 159, 107495. https://doi.org/10.1016/j.cie.2021.107495

14. *Wang, Z., Zhao, X., Xu, Z., Li, X., Qu, X. (2021). Modeling and field experiments on lane changing of an autonomous vehicle in mixed traffic. *Computer-Aided Civil and Infrastructure Engineering*, 36(7), 877-889. https://doi.org/10.1111/mice.12540

15. *Pei, M., Lin, P., Du, J. & Li, X., Chen, Z. (2021). Vehicle dispatching in modular transit networks: A nonlinear mixed-integer programming model. *Transportation Research Part E*, 147, 102240. https://doi.org/10.1016/j.tre.2021.102240

16. *Li, Q., Li, X., Mannering, F. (2021) An assessment of discretionary lane changing decisions: A random parameters approach with heterogeneity in means and variances, *Transportation Research Record*, 0361198121992364. https://doi.org/10.1177/0361198121992364

17. Wang, Z., Zhao, X., Chen, Z. (corresponding author) & Li, X. (2021). A dynamic cooperative lane-changing model for connected and autonomous vehicles with possible accelerations of a preceding vehicle. *Expert Systems with Applications*. 173 (1), 114675. https://doi.org/10.1016/j.eswa.2021.114675

18. *Chen, Z. & Li, X. (2021). Unobserved heterogeneity in transportation equity analysis: Evidence from a bike-sharing system in southern Tampa. *Journal of Transport Geography*, 91, 102956. https://doi.org/10.1016/j.jtrangeo.2021.102956

19. *Kolpakov, A., Sipiora, A.M., Li, X., Johnson, C., Nobler E. (2021). Fleet and fuel strategies for transportation resilience (invited). *Revista Internacional de Desastres Naturales, The International*

Journal of Natural Disasters, Accidents and Civil. Infrastructure (RIDNAIC), 19-20 (1), 43-51.

20. *Xu, Z., Wang, Y., Wang, G., Li, X., Bertini, R., Qu, X. and Zhao, X. (2021). Trajectory optimization for a connected automated traffic stream: Comparison between an exact model and fast heuristics. ***IEEE Transactions on ITS***, 22(5), 2969-2978. https://10.1109/TITS.2020.2978382.

21. *Yao, H., Li, Q., Li., X. (2020). A study of relationships in traffic oscillation features based on field experiments. ***Transportation Research Part A***, 141, 339-355. https://doi.org/10.1016/j.tra.2020.09.006

22. *Yao, H., Li., X. (2020). Decentralized control of connected automated vehicle trajectories in mixed traffic at an isolated signalized intersection, ***Transportation Research Part C***, 121, 102846. https://doi.org/10.1016/j.trc.2020.102846

23. *Soleimaniamiri, S., Ghiasi, A., Li, X. & Huang, Z. (2020). An analytical optimization approach to the joint trajectory and signal optimization problem for connected automated vehicles. ***Transportation Research Part C***, 120, 102759. https://doi.org/10.1016/j.trc.2020.102759

24. *Shi, X., Chen, Z., Pei, M. & Li, X. (2020). Variable-capacity operations with modular transits for shared-use corridors. ***Transportation Research Record***, 2674(9), 230-244. https://doi.org/10.1177/0361198120928077.

25. *Zhao, X., Wang, Z., Xu, Z., Wang, Y., Li, X. & Qu, X. (2020). Field experiments on longitudinal characteristics of human driver behavior following an autonomous vehicle. ***Transportation Research Part C***, 114 205-224. https://doi.org/10.1016/j.trc.2020.02.018

26. *Xu, Y., Jia, B., Li, X., Li, M. & Ghiasi, A. (2020). An integrated micro-macro approach for high-speed railway energy-efficient timetabling problem. ***Transportation Research Part C***, 112: 88-115. https://doi.org/10.1016/j.trc.2020.01.008

27. *Zhao, D., Balusu, S.K., Sheela, P.V., Li, X., Pinjari, A., Eluru, N., (2020). Weight-categorized truck flow estimation: a data-fusion approach and a Florida case study. ***Transportation Research Part E***, forthcoming, 136: 101890. https://doi.org/10.1016/j.tre.2020.101890

28. *Yun, L., Wang, X., Fan, H., & Li, X. (2020). Reliable facility location design with round-trip transportation under imperfect information part i: a discrete model. ***Transportation Research Part E***, 124, 44-59. https://doi.org/10.1016/j.tre.2019.101825

29. Guo, Y., Chen, Z., Stuart, A., Li, X. & Zhang, Y. (2020). A systematic overview of transportation equity in terms of accessibility, traffic emissions, and safety outcomes: From conventional to emerging technologies. ***Transportation research interdisciplinary perspectives,*** 4, 100091***.*** https://doi.org/10.1016/j.trip.2020.100091

30. Li, X., Qu, X., Chow, J. Y. J., Menendez, M., & Qian, Z. S. (2019). Emerging Mobility Systems (Guest Editorial). ***IEEE Intelligent Transportation Systems Magazine***, 11(3), 8-11. [8772325]. https://doi.org/10.1109/MITS.2019.2921082.

31. *Chen, Z., Guo, Y., Stuart, A., Zhang, Y. & Li, X. (2019). Exploring the equity performance of bike-sharing systems with disaggregated data: A story of southern Tampa. ***Transportation Research Part A***, 130, 529-545. https://doi.org/10.1016/j.tra.2019.09.048

32. Pei, M., Lin, P., Du, J., and Li, X. (2019). Operational design for a real-time flexible transit system considering passengers' demands and willingness to pay. ***IEEE Access***, 10.1109/ACCESS.2019.2949246 .

33. Hua, Y., Zhao, D., Wang, X. & Li, X. (2019). Joint infrastructure planning and fleet management for one-way electric car sharing under time-varying uncertain demand. ***Transportation Research Part B***, 128, 185-206. https://doi.org/10.1016/j.trb.2019.07.005

34. *Zhao, D., Li, X. & Cui, J. (2019). A simulation-based optimization model for infrastructure planning for electric autonomous vehicle sharing. ***Computer-aided Civil and Infrastructure Engineering,*** *forthcoming****.*** https://doi.org/10.1111/mice.12506

35. *<u>Wang, Y.</u>, Li, X., Tian, J. & Jiang, R., (2019). Stability analysis of stochastic linear car-following models. ***Transportation Science***, *54*(1), 274-297. https://www.researchgate.net/publication/322406066_Stability_analysis_of_stochastic_linear_car-following_models

36. *<u>Yun, L.</u>, <u>Fan, H.</u>, & Li, X. (2019). Reliable facility location design with round-trip transportation under imperfect information part II: A continuous model. ***Transportation Research Part B***: Methodological, 124, 44-59. https://doi.org/10.1016/j.trb.2019.04.002

37. *<u>Wang, Z.</u>, <u>Shi, X.</u>, & Li, X. (2019). Review of lane-changing maneuver of connected and automated vehicles: models, algorithms and traffic impact analyses. ***Journal of the Indian Institute of Science***, 99, 589-599. https://link.springer.com/article/10.1007/s41745-019-00127-7

38. <u>Yang, R.</u>, Wang, Z., Lin, P. S., Li, X., Chen, Y., Hsu, P. P., & Henry, A. (2019). Safety effects of street lighting on roadway segments: Development of a crash modification function. ***Traffic Injury Prevention***, *20*(3), 296-302. https://doi.org/10.1080/15389588.2019.1573317

39. *<u>Wang, Y.</u>, Li, X., & <u>Yao, H.</u> (2019). Review of trajectory optimisation for connected automated vehicles. ***IET Intelligent Transport Systems***, 13 (4), 580-586. https://doi.org/10.1049/iet-its.2018.5184

40. *<u>Ghiasi, A.</u>, <u>Hussain, O.</u>, Qian, S.Z. & Li, X. (2019). Lane management with variable lane width and model calibration for connected automated vehicles. ***Journal of Transportation Engineering Part A*** (**Received *JTE Part A 2020 Best Paper***), 146(3), 04019075. https://ascelibrary.org/doi/full/10.1061/JTEPBS.0000283

41. *<u>Ghiasi, A.</u>, Li, X., <u>Ma, J.</u> (2019). A mixed traffic speed harmonization model with connected automated vehicles. ***Transportation Research Part C***, 104, 210-233. https://doi.org/10.1016/j.trc.2019.05.005

42. *<u>Chen., Z.</u>, Li, X. & Zhou, X. (2019) Operational design for shuttle systems with modular vehicles under oversaturated traffic: Continuous modeling method. ***Transportation Research Part B*** (jointly presented at ***the 23 International Symposium on Transportation and Traffic Theory***), 132, 76-100. https://doi.org/10.1016/j.trb.2019.05.018

43. *<u>Chen., Z.</u>, Li, X. & Zhou, X. (2019) Operational design for shuttle systems with modular vehicles under oversaturated traffic: Discrete modeling method. ***Transportation Research Part B***, 122, 1-19. https://doi.org/10.1016/j.trb.2019.01.015

44. Li, X. Medal, H. & Qu, X., (2019). Connected infrastructure location design under additive service utilities. ***Transportation Research Part B***, 120, 99-124. https://doi.org/10.1016/j.trb.2018.12.007

45. *<u>Li, L.</u> & Li, X. (2019). Parsimonious trajectory design of connected automated traffic. ***Transportation Research Part B***, 119, 1-21. https://doi.org/10.1016/j.trb.2018.11.006

46. Dong, S., Mostafizi, A., Wang, H., Gao, J., and Li X. (2019). Measuring the topological robustness of transportation networks to disaster-induced failures: A percolation approach. ***Journal of Infrastructure Systems***, forthcoming.

47. Guo, Y., <u>Ma, J.</u>, Xiong, C., Li, X., <u>Zhou, F.</u>, & Hao, W. (2019). Joint optimization of vehicle trajectories and intersection controllers with connected automated vehicles: Combined dynamic programming and shooting heuristic approach. ***Transportation Research Part C***, 98, 54-72. https://doi.org/10.1016/j.trc.2018.11.010

48. *<u>Parsafard, M.</u>, Chi, G., Qu, X., Li, X. & Wang, H. (2019). Error measures for trajectory estimations with geo-tagged mobility sample data. ***IEEE Transactions on ITS***, 20 (7), 2566 - 2583. https://doi.org/10.1109/TITS.2018.2868182

49. *<u>Fang, H.</u>, Ma, J. & Li, X. (2018). A reliable location model for heterogeneous systems under partial capacity losses. ***Transportation Research Part C***, 97, pp. 235-257. https://doi.org/10.1016/j.trc.2018.10.014

50. *Li, X., <u>Ghiasi, A.</u>, Xu, Z. & Qu, X. (2018). A piecewise trajectory optimization model for connected automated vehicles: Exact optimization algorithm and queue propagation analysis. ***Transportation***

Research Part B, 118: 429-456. https://doi.org/10.1016/j.trb.2018.11.002

51. *Yao, H., Cui, J., Li, X., Wang, Y. & An, S. (2018). A trajectory smoothing method at signalized intersection based on individualized variable speed limits with location optimization. *Transportation Research Part D*, 62, pp. 456-473. https://doi.org/10.1016/j.trd.2018.03.010

52. Zhao, M., Li, X., Yin, J., Cui., J., Yang, L., & An, S. (2018). An integrated framework for electric vehicle rebalancing and staff rebalancing in one-way carsharing systems: Model formulation and Lagrangian relaxation-based solution approaches. *Transportation Research Part B*, 117(a), 542-572. https://doi.org/10.1016/j.trb.2018.09.014

53. Li, C., Ghiasi, A., Li, X. & Chi, G. (2018). Sociodemographics and access to organic and local food: A case study of New Orleans, Louisiana. *Cities,* 79, pp. 141-150. https://doi.org/10.1016/j.cities.2018.03.003

54. Ansari, S., Basdere, M., Li, X., Ouyang, Y., & Smilowitz, K. (2018), Advancements in continuous approximation models for logistics and transportation systems: 1996 – 2016. *Transportation Research Part B*, 107, 229-252. https://doi.org/10.1016/j.trb.2017.09.019

55. Ma, L., Chen, X., Li, X., Ding C. & Wang, Y. (2018). Sustainable station-level planning: An integrated transport and land use design model for transit-oriented development. *Journal of Cleaner Production*, 179, pp. 1052-1063. https://doi.org/10.1016/j.jclepro.2017.09.182

56. *Ghiasi, A., Hussein, O., Qian, S.Z. & Li, X. (2017). A mixed traffic capacity analysis and lane management model for connected automated vehicles: a Markov chain method. *Transportation Research Part B*, 106, pp. 266-292. https://doi.org/10.1016/j.trb.2017.09.022

57. Qu, X., Li, X., Wang, M., & Dixit, V. (2017) Advances in modelling connected and automated vehicles. *Journal of Advanced Transportation* (editorial). https://doi.org/10.1155/2017/3268371

58. Xu, Y., Jia, B., Ghiasi, A. & Li, X. (2017). Train routing and timetabling problem for heterogeneous train traffic with switchable scheduling rules. *Transportation Research Part C*, *84*, pp.196-218. https://doi.org/10.1016/j.trc.2017.08.010

59. Ma, J., Li, X., Zhou, F. & Hao, W. (2017). Designing optimal autonomous vehicle sharing and reservation systems: a linear programming approach. *Transportation Research Part C*, *84*, pp.124-141. https://doi.org/10.1016/j.trc.2017.08.022

60. Zhou, M., Qu, X., Li, X. (2017). A recurrent neural network based car-following model to predict traffic oscillations. *Transportation Research Part C*, *84*, pp.245-264. https://doi.org/10.1016/j.trc.2017.08.027

61. Yun, L., Wang, X., Fang, H., & Li, X. (2017). A reliable facility location design model with site-dependent disruption in the imperfect information context. *PLOS ONE*, 12(5), e0177104. https://doi.org/10.1371/journal.pone.0177104

62. Qian, Z.S., Li, J., Li, X., Zhang, M. & Wang, H. (2017). Modeling heterogeneous traffic flow: A pragmatic approach. *Transportation Research Part B*, 99, pp.183-204. https://doi.org/10.1016/j.trb.2017.01.011

63. *Ma, J., Li, X., Zhou, F., Hu, J. & Park, B. (2017). Parsimonious shooting heuristic for trajectory design of connected automated traffic part II: Computational issues and optimization. *Transportation Research Part B*, 95, 421-441. https://doi.org/10.1016/j.trb.2016.06.010

64. *Zhou, F., Li, X. & Ma, J. (2017). Parsimonious shooting heuristic for trajectory design of connected automated traffic part I: Theoretical analysis with generalized time geography. *Transportation Research Part B*, 95, 394-420. https://doi.org/10.1016/j.trb.2016.05.007

65. *Cui, J., Zhao, M., Li, X., Parsafard, M. & An S. (2016) Reliable design of an integrated supply chain with expedited shipments under disruption risks. *Transportation Research Part E,* 95, 143-163. https://doi.org/10.1016/j.tre.2016.09.009

66. Eghbal, R., Parsafard, M., Hugh, M., & Li, X. (2016). Optimal traffic calming: A mixed-integer bi-level programming model for locating sidewalks and crosswalks in a multimodal transportation network to maximize pedestrians' safety and network usability. *Transportation Research Part E,* 91, 33-50. https://doi.org/10.1016/j.tre.2016.03.016

67. *Li, X., Ma, J., Cui, J., Ghiasi, A. & Fang, Z. (2016). Design framework of large-scale one-way electric vehicle sharing systems: A continuum approximation model. *Transportation Research Part B*, 88, 21-45. https://doi.org/10.1016/j.trb.2016.01.014

68. Ma, J., Li, X., Shladover, S., Rakha, H., Lu, X., Jagannathan, R., Dailey, D.J. (2016). Freeway speed harmonization. *IEEE Transactions on Intelligent Vehicles*, PP(99), 1. https://doi.org/10.1109/TIV.2016.2551540

69. Marufuzzaman, M., Li, X., Yu, F. & Zhou, F. (2016). Supply chain design and management for syngas production. *ACS Sustainable Chemistry & Engineering*, 4(3), 890-900. https://doi.org/10.1021/acssuschemeng.5b00944

70. Xie, S., Li, X., & Ouyang, Y. (2015). Decomposition of general facility disruption correlations via augmentation of virtual supporting stations. *Transportation Research Part B*, 80, 64–81. https://doi.org/10.1016/j.trb.2015.06.006

71. Parsafard, M., Esmaeel, A., Masoud, K., Mohammadreza, N., & Li, X (2015). Practical approach for finding optimum routes for fuel delivery trucks in large cities. *Transportation Research Record*, 2478, 66-74. https://doi.org/10.3141%2F2478-08

72. *Yun, L., Qi, Y., Fan, H., Ji, C., Li, X. & Jia, L. (2015). A reliability model for facility location design under imperfect information. *Transportation Research Part B*, 81(2), 596-615. https://doi.org/10.1016/j.trb.2014.10.010

73. Bai, Y., Li, X., Peng, F., & Ouyang, Y. (2015). Effects of disruption risks on biorefinery location design. *Energies*, 8(2), 1468-1486. https://doi.org/10.3390/en8021468

74. *Li, X., Cui, J., An, S., & Parsafard, M. (2014). Stop-and-go traffic analysis: theoretical properties, environmental impacts and oscillation mitigation. *Transportation Research Part B*, 70, 319–339. https://doi.org/10.1016/j.trb.2014.09.014

75. Marufuzzaman, M., Eksioglu, S., Li, X., & Wang, J. (2014). Analyzing the impact of intermodal-related risk to the design and management of biofuel supply chain. *Transportation Research Part E*, 69, 122-145. https://doi.org/10.1016/j.tre.2014.06.008

76. *Li, X., Ouyang, Y., & Peng, F. (2013). A supporting station model for reliable infrastructure location design under interdependent disruptions. *Transportation Research Part E,* 60, 80-93. https://doi.org/10.1016/j.sbspro.2013.05.003

77. *Li, X. (2013). An integrated modelling framework for design of logistics networks with expedited shipment services. *Transportation Research Part E*, 56, 46-63. https://doi.org/10.1016/j.tre.2013.05.004

78. An., S., Cui, N., Li, X., & Ouyang, Y. (2013). Location planning for transit-based evacuation under the risk of service disruptions. *Transportation Research Part B*, 54, 1-16. https://doi.org/10.1016/j.trb.2013.03.002

79. Li, X. & Ouyang, Y. (2012). Reliable traffic sensor deployment under probabilistic disruptions and generalized surveillance effectiveness measures. *Operations Research*, 60 (5), 1183-1198. https://doi.org/10.1287/opre.1120.1082

80. Li, X., Wang, X. & Ouyang, Y. (2012). Prediction and field validation of traffic oscillation propagation under nonlinear car-following laws. *Transportation Research Part B*, 46(3), 409-423. https://doi.org/10.1016/j.trb.2011.11.003

81. Li, X. & Ouyang, Y. (2011). Reliable sensor deployment for network traffic surveillance. *Transportation Research Part B*, 45 (1), 218-231. https://doi.org/10.1016/j.trb.2010.04.005

82. Li, X. & Ouyang, Y. (2011). Characterization of traffic oscillation propagation under nonlinear car-following laws. *Transportation Research Part B*, 45 (9), 1346-1361. https://doi.org/10.1016/j.sbspro.2011.04.538

83. Chen, Q., Li, X. & Ouyang, Y. (2011). Joint inventory-location problem under the risk of probabilistic facility disruptions. *Transportation Research Part B*, 45 (7), 991-1003.

https://doi.org/10.1016/j.trb.2011.04.004

84. Peng, F., Li, X. & Ouyang, Y. (2011). Installation of railroad wayside defect detectors: multiperiod design. *Transportation Research Record*, 2261, 148-154. https://doi.org/10.3141%2F2261-17

85. Peng, F., Kang, S., Li, X., Ouyang, Y., Somani, K., & Acharya, D. (2011). A heuristic approach to the railroad track maintenance scheduling problem. *Computer-Aided Civil and Infrastructure Engineering*, 26 (2), 129-145. https://doi.org/10.1111/j.1467-8667.2010.00670.x

86. Li, X. & Ouyang, Y. (2010). A continuum approximation approach to reliable facility location design under correlated probabilistic disruptions. *Transportation Research Part B*, 44 (4), 535-548. https://doi.org/10.1016/j.trb.2009.09.004

87. Li, X., Peng, F. & Ouyang, Y. (2010). Measurement and estimation of traffic oscillation properties. *Transportation Research Part B*, 44 (1), 1-14. https://doi.org/10.1016/j.trb.2009.05.003

88. Ouyang, Y. & Li, X. (2010). The bullwhip effect in supply chain networks. *European Journal of Operational Research*, 201 (3), 799-810. https://doi.org/10.1016/j.ejor.2009.03.051

89. Ouyang, Y., Li, X., Barkan, C., Kawprasert, A., & Lai, Y.C. (2009). Optimal locations of railroad wayside defect detection installations. *Computer-aided Civil and Infrastructure Engineering*, 24 (5), 309-319. https://doi.org/10.1111/j.1467-8667.2008.00584.x

Under Revision

90. *Li, Q. & Li, X. Trajectory optimization for autonomous modular vehicle or platooned autonomous vehicle split operations. *Transportation Research Part B*, under revision

91. *Shi, X., Chen, Z. & Li, X., Modular autonomous vehicle operations for airport baggage transportation. *European Journal of Operational Research*, under revision

92. *Li, Q. & Li, X. Trajectory planning for autonomous modular vehicle docking operations., *Transportation Science*, under revision.

93. *Parsafard, M. & Li, X., Sensor location design for interdicting mobile travelers with probabilistic space-time trajectories. *Transportation Research Part C*, under revision.

Submitted

94. Li, Q., Yao, H. & Li, X. A Matched Case-control Approach to Model Car-following Safety Considering Lateral and Longitudinal Characteristics. *Accident Analysis & Prevention,* submitted.

95. *Shi, X., Zhao, D. Yao, H. & Li, X. Video-based Trajectory Generation with Deep Learning for High-Granularity Highway Simulation (HIGH-SIM). *Transportation Research Part C,* submitted.

96. *Li, Q. & Li, X. Generalized Fundamental Diagram with Implications of Congestion Mitigation. *Transportation Research Part A,* submitted.

97. *Yao, H. & Li, X. Utilizing dimensionality reduction techniques to enhance machine-learning based trajectory prediction. *IEEE Transactions on Intelligent Transportation Systems,* submitted. https://www.researchgate.net/publication/351748779_Utilizing_Dimensionality_Reduction_Techniques_to_Enhance_Machine-Learning_based_Trajectory_Prediction

98. *Li, X. Trade-off between safety, mobility and stability in automated vehicle following control. *Transportation Research Part B,* submitted.

99. *Li, Q., Li, X., Yao, H. & Liang, Z. Automated vehicle identification based on car-following data: machine learning and physical models. *IEEE Transactions on Cybernetics*, submitted. https://www.researchgate.net/publication/348310120_Automated_Vehicle_Identification_Based_on_Car-following_Dynamics

100. *Fan, H., Yun, L. & Li, X. A Linear-Time Crystal-Growth Algorithm for Discretization of Continuum Approximation. *Transportation Part E*, submitted

101. *Shi, X., Yao, H. Liang, Z. & Li, X. An Empirical Study on Fuel Consumption of Commercial Automated Vehicles. *Applied Energy*, submitted.

102. *Zhao., D., Li, X., Wang, X., Electric Vehicle Sharing Based "Energy Sponge" Service Interfacing

Transportation and Power Systems. *Transportation Research Part C*, submitted

103. *Soleimaniamiri, S. & Li, X., Scheduling of Heterogeneous Connected Automated Vehicles at a General Conflict Area, *Transportation Research Part B*, submitted

104. Wang, Z., Zhao, X., Shi, X.(corresponding author) & Li, X. Modeling Decentralized Mandatory Lane Change for Connected and Autonomous Vehicles: An Analytical Method. *Transportation Research Part C*, submitted.

105. Zheng, S., Jiang R, Tian, J., Li, X., Treiber, M., Li, Z., Gao, L. & Jia, B. Empirical and experimental study on the growth pattern of traffic oscillations upstream of fixed bottleneck and model test, *IEEE Transactions on Intelligent Transportation Systems*, submitted

106. Zheng, S., Jiang, R., Tian, J., Li, X., Jia, B., Gao, Z., & Yu, S. A comparison study on the growth pattern of traffic oscillations in car-following experiments. *Transportmetrica B*, under review.

107. Wang, Z., Tian, J., Jiang, R., Li, X. & Ma, S., Car following model simulating traffic breakdown and concave growth pattern of oscillations in traffic flow. *IEEE Transactions on Intelligent Transportation Systems*, under revision.

BOOK CHAPTERS

1. Calvert S, Mahmassani H, Meier JN, Varaiya P, Hamdar S, Chen D, Li X, Talebpour A, Mattingly SP. "Traffic Flow of Connected and Automated Vehicles: Challenges and Opportunities". Road Vehicle Automation 4. 2018:235.

2. van Arem, B., Abbas, M. M., Li, X., Head, L., Zhou, X., Chen, D., Bertini, R., Mattingly, S., Wang, H. and Orosz, G. (2016). Integrated Traffic Flow Models and Analysis for Automated Vehicles. In Road Vehicle Automation 3 (pp. 249-258). Springer International Publishing.

PATENT & SOFTWARE

1. Li, X., Zhao, D., *Video-Based Intelligent Road Traffic Universal Analysis Tool (VIRTUAL)*. Patent No., US 11,068,713. July 23, 2019.

2. Zhou, F., Marufuzzaman, M., Li, X., and Eksioglu, S. (2014) *Internet-based Biofuel Supply Design Platform* (http://biofuel.msstate.edu/), Mississippi State University

3. Li, X. and Ouyang, Y. (2007) *Railroad Wayside Detector Location Solver (RWDLS), V1.0*, University of Illinois at Urbana-Champaign.

MEDIA & MAGAZINE ARTICLES

1. Bay News 9, USF Autonomous Vehicle Research, March 24, 2021. https://www.youtube.com/watch?v=quK3CIiXVO

2. Sarafina Brooks. USF professor creates self-driving vehicle. WFLA PLUS, Feb 4, 2020. https://www.wfla.com/news/wfla-plus/replacing-human-drivers-with-computers-usf-professor-creates-self-driving-vehicle/

3. USF CAV Demonstration, ABC News, November 8, 2019 http://mms.tveyes.com/transcript.asp?StationID=1980&DateTime=11%2f8%2f2019+6%3a36%3a46+AM&PlayClip=true

4. USF Researcher Uses NSF Grant to Improve Safety of Autonomous Vehicles, USF News Room, October 22, 2019 https://www.usf.edu/news/2019/usf-researcher-uses-nsf-grant-improve-safety-autonomous-vehicles.aspx

5. Ouyang, Y., Li, X., Lai, Y.C., Barkan, C. and Kawprasert, A., "Optimizing Installation Locations for Railroad Wayside Defect Detection Facilities." *Technology Digest*, Association of American Railroads, TD-08-023, June 2008.

OPEN DATA

1. Connected and automated vehicle lane changing in mixed traffic: https://github.com/sgzzgit/Autonomous-Vehicle-Lane-Change-Experiment-Data

2. Connected and automated vehicle car following in mixed traffic: https://github.com/sgzzgit/Field-

[Experiment-Data](#)

CONFERENCE PAPERS AND PRESENTATIONS

Peer Reviewed Papers/Presentations

1. * Wang, Z. & Zhao, X., Xu, Z., Li, X. " Lane Changing Maneuver for Autonomous Vehicle in Mixed Traffic." Presented at the 99th TRB Annual Meeting, Washington D.C., January 2020.

2. * Wang, Z. & Zhao, X., Xu, Z., Li, X. " Lane Changing Maneuver for Autonomous Vehicle in Mixed Traffic." Presented at the 99th TRB Annual Meeting, Washington D.C., January 2020.

3. *Zhao, D. & Li, X. " Video-Based Intelligent Traffic Analysis System: A Comprehensive and Effective Solution to Extract Trajectories from Aerial Videos." Presented at the 99th TRB Annual Meeting, Washington D.C., January 2020.

4. *Liu, H., Li, X., Soleimaniamiri, S. & Xie, S. "Network Location and Assignment Design for Cooperation of Multi-Type Fire Vehicles." Presented at the 99th TRB Annual Meeting, Washington D.C., January 2020.

5. *Chen, Z., Li, X. "A Continuous Model for Designing Corridor Systems with Modular Vehicles Enabling En-Route Docking." Presented at the 99th TRB Annual Meeting, Washington D.C., January 2020.

6. *Shi, X., Chen, Z., Pei, M. & Li, X "Variable-Capacity Operations with Modular Transits for Shared-Use Corridors." Presented at the 99th TRB Annual Meeting, Washington D.C., January 2020.

7. *Li, Q. & Li, X. " Trajectory Design for Autonomous Modular Vehicle Docking Operations." Presented at the 99th TRB Annual Meeting, Washington D.C., January 2020.

8. *Chen, Z., Guo, Y., Stuart, A., Zhang, Y. & Li, X. "How Can Disaggregate Data Facilitate Transportation Equity Analysis? – A Case of the Coast Bikeshare System in Southern Tampa." Presented at the 99th TRB Annual Meeting, Washington D.C., January 2020.

9. *Chen, Z., Li, X. "Timetable Design for Urban Transit Corridors with Time-Varying Vehicle Capacity." Presented at the 99th TRB Annual Meeting, Washington D.C., January 2020.

10. *Pei, M., Lin, P., Du, J., and Li, X., "Designing Modular Transit Network Systems Based on Modular Vehicle Technology", 2019 International Symposium of Multimodal Transpiration, Singapore, December 06 2019;

11. *Zhao, D., Li, X., "Real-World Trajectory Extraction from Aerial Videos – A Comprehensive and Effective Solution", IEEE ITSC, Auckland, New Zealand, October 2019

12. *Shi, X. & Li, X. "Speed Planning for an Autonomous Vehicle with Conflict Moving Objects", IEEE ITSC, Auckland, New Zealand, October 2019

13. Xu, Z., Wang, Y. Wang, G., Li, X., Quan, Y., Zhao, X. "trajectory optimization for a connected automated traffic stream: comparison between an exact model and fast heuristics." In: Proceeding of presentation the 98th TRB Annual Meeting, Washington D.C., January 2019.

14. Yao, H., Cui, J., Li, X., & An, S. "Analysis of relationships in traffic oscillation features with field experiments transportation research board." In: Proceeding of presentation the 98th TRB Annual Meeting, Washington D.C., January 2019.

15. Zhao, D., Li, X., Wang, X., "Electric Vehicle Sharing Based "Energy Sponge" Service Interfacing Transportation and Power Systems." In: Proceeding of the 98th TRB Annual Meeting, Washington D.C., January 2019.

16. Hua, Y., Zhao, D., Wang, X. and Li, X. "Scenario-based Multistage Stochastic Model for Infrastructure Planning for One-way Electric Car Sharing" In: Proceeding of the 97th TRB Annual Meeting,

Washington D.C., January 2018 (No. 18-05878).

17. *Ghiasi, A., Hussain, O., Qian, Z. and Li, X. "Markov Chain–Based Mixed Connected Automated Traffic Capacity Analysis Part 1: Analytical Modeling" In: Proceeding of the 97th TRB Annual Meeting, Washington D.C., January 2018 (No. 18-02929).

18. *Yao, H., An, S., Cui, J. and Li, X. "Variable Speed Limits Method with Location Optimization at Signalized Intersection" In: Proceeding of the 97th TRB Annual Meeting, Washington D.C., January 2018 (No. 18-03245).

19. Xu, Y., Jia, B., Ghiasi, A., Li, X. and Li, M. "An Integrated Micro–Macro Approach for High-Speed Railway Energy-Efficient Timetabling Problem" In: Proceeding of the 97th TRB Annual Meeting, Washington D.C., January 2018 (No. 18-02323)

20. Hu, M., Chen, Y., Li, and Xiong, K., "An Agent Based Simulation Model For Distributed Vehicle Sharing Operation", Proceedings of the 2017 Winter Simulation Conference, Las Vegas, Nevada, December 3-6, 2017

21. Lin, P., Wang, Z., Parsafard, M., Li, X. and Chandler, C. "Optimization of Freeway Patrol Operations – A Comprehensive Case Study", 30th Annual Meeting of the International Chinese Transportation Professionals Association (ICTPA), Houston, May 19-21, 2017. ISBN: 978-1-64008-627-2. (Best Paper Award).

22. *Ghiasi, A., Ma, J., Zhou, F. and Li, X. "Speed Harmonization Algorithm Using Connected Autonomous Vehicles" In: Proceeding of the 96th TRB Annual Meeting, Washington D.C., January 2017

23. *Yu, L., Wang, X., Fan, H., Li, X., and Dong, P. "A Continuum Approximation Method for Reliable Facility Location Design with Imperfect Information" In: Proceeding of the 96th TRB Annual Meeting, Washington D.C., January 2017

24. *Li, X. and Ghiasi, A., "Exact Method for A Simplified Trajectory Smoothing Problem with Connected Automated Vehicles" In: Proceeding of the 96th TRB Annual Meeting, Washington D.C., January 2017

25. Ma, J., Li, X. and Zhou, F. "Designing An Optimal Autonomous Vehicle Sharing And Reservation System: A Linear Programming Approach" In: Proceeding of the 96th TRB Annual Meeting, Washington D.C., January 2017

26. Xu, Y., Jia B., Ghiasi, A. and Li X., "Train Routing And Timetabling Problem With Switchable Dispatching Policy" In: Proceeding of the 96th TRB Annual Meeting, Washington D.C., January 2017

27. *Ma, J., Li, X. and Zhou, F. "Facility Location Design for Interdependent Systems with Probabilistic Disruptions." In: Proceeding of the 95th TRB Annual Meeting, Washington D.C., January 2016

28. *Zhao., M., Cui, J., Li, X., Parsafard, M. and An, S. "Reliable Model for Integrated Supply Chain Design Under Disruption Risk." In: Proceeding of the 95th TRB Annual Meeting, Washington D.C., January 2016

29. *Zhou, F., Li, X. and Ma, J., "Trajectory Control of Automated Connected Vehicles: Fundamental Theories and Traffic Flow Properties." In: Proceeding of the 95th TRB Annual Meeting, Washington D.C., January 2016

30. *Li, C., Ghiasi, A., Li, X. and Chi, G., "Sociodemographic Characteristics Associated with Access to Organic and Local Food." In: Proceeding of the 95th TRB Annual Meeting, Washington D.C., January 2016

31. *Ma, J., Zhou, F., and Li, X. "Trajectory Control of Automated Connected Vehicles: Computational Issues and Optimization." In: Proceeding of the 95th TRB Annual Meeting, Washington D.C., January 2016

32. *Parsafard, M., Li, X., Cui, J., and An, S. "A Describing Function Method for Traffic Oscillation Analysis:

Theoretical Properties." In: Proceeding of the 94th TRB Annual Meeting, Washington D.C., January 2015

33. *Parsafard, M., Li, X., Cui, J., and An, S. "A Describing Function Method for Traffic Oscillation Analysis: Environmental Impacts and Oscillation Mitigation." In: Proceeding of the 94th TRB Annual Meeting, Washington D.C., January 2015

34. *Yang, Y., Qin, Y. and Li, X., "Correlation Patterns of Highway Segment Travel Times." In: Proceeding of the 94th TRB Annual Meeting, Washington D.C., January 2015

35. Parsafard, M., Esmaeel, A., Masoud, K., Mohammadreza, N., Li, X., "A Practical Approach for Finding the Optimum Routes for Fuel Delivery Trucks in Large Cities." In: Proceeding of the 94th TRB Annual Meeting, Washington D.C., January 2015

36. *Li, X., Medal, H., and Wang, J. "A Network Design Model under Connectivity Constraints with Heterogeneous Services." In: Proceeding of the 93rd TRB Annual Meeting, Washington D.C., January 2014

37. *Yun, L., Ji, C., Li, X., and Fan, H. "A Reliability Model for Facility Location Design under Imperfect Information." In: Proceeding of the 93rd TRB Annual Meeting, Washington D.C., January 2014

38. Marufuzzaman, M., Li, X., Eksioglu, S. and Wang, J. "Designing a Reliable Intermodal Hub and Spoke System for Biofuel Supply Chain Network." In: Proceeding of the 93rd TRB Annual Meeting, Washington D.C., January 2014

39. Leng, J., Li, X., Li, W. and He, Y. "Distribution and Reliability of Travel Time on Urban Highways Under Ice or Snowfall Conditions." In: Proceeding of the 93rd TRB Annual Meeting, Washington D.C., January 2014

40. *Li, X., Ouyang, Y. and Peng, F. "A supporting station model for reliable infrastructure location design under interdependent disruptions." In: Proceedings of the 20th International Symposium of Traffic and Transportation Theory (ISTTT), Noordwijk, the Netherlands, July 2013

41. *Li, X. "Network design of logistics systems with expedited shipment services." In: Proceeding of the 92nd TRB Annual Meeting, Washington D.C., January 2013

42. *Li, X., Ouyang, Y. and Peng, F. "A Supporting Station Model for Reliable Infrastructure Location Design under Interdependent Disruptions." In: Proceeding of the 92nd TRB Annual Meeting, Washington D.C., January 2013

43. Li, X., Wang, X. and Ouyang, Y. "Prediction and Field Validation of Traffic Oscillation Propagation under Nonlinear Car-Following Laws." In: Proceeding of the 91st TRB Annual Meeting, Washington D.C., January 2012

44. Chen, Q., Li, X. and Ouyang, Y. "Joint Inventory-Location Problem under the Risk of Probabilistic Facility Disruptions." In: Proceeding of the 91st TRB Annual Meeting, Washington D.C., January 2012

45. An, S., Cui, N., Li, X. and Ouyang, Y. "Reliable Pickup Locations for Transit-based Evacuation under the Risk of Service Disruptions." In: Proceeding of the 91st TRB Annual Meeting, Washington D.C., January 2012

46. Li, X. and Ouyang, Y. Characterization of Traffic Oscillation Propagation Under Nonlinear Car-Following Laws. In: Proceedings of the 19th International Symposium of Traffic and Transportation Theory (ISTTT), Berkeley CA, July 2011

47. Li, X. and Ouyang, Y. "Characterization of Traffic Oscillation Propagation under Nonlinear Car-Following Laws." In: Proceeding of the 90th TRB Annual Meeting, Washington D.C., January 2011

48. Li, X. and Ouyang, Y. "Reliable Traffic Sensor Deployment under Probabilistic Disruptions and Generalized Surveillance Effectiveness Measures." In: Proceeding of the 90th TRB Annual Meeting, Washington D.C., January 2011

49. Li, X., Peng, F., Bai, Y. and Ouyang, Y. "Effects of Disruption Risks on Biorefinery Location Design: Discrete and Continuous Models." In: Proceeding of the 90th TRB Annual Meeting, Washington D.C., January 2011

50. Peng, F., Li, X. and Ouyang, Y. "Multi-Period Installation Design of Railroad Wayside Defect Detection Installations." In: Proceeding of the 90th TRB Annual Meeting, Washington D.C., January 2011

51. Li, X. and Ouyang, Y. "Reliable Sensor Deployment for Network Traffic Surveillance." In: Proceeding of the 4th International Symposium on Transportation Network Reliability, Minneapolis, July 2010

52. Li, X. and Ouyang, Y. "Effects of Failure Correlation on Reliable Facility Location: A Continuum Approximation Approach." In: Proceeding of the 89th TRB Annual Meeting, Washington D.C., January 2010

53. Li, X. and Ouyang, Y. "Reliable Sensor Location for Network Traffic Surveillance." In: Proceeding of the 89th TRB Annual Meeting, Washington D.C., January 2010

54. Ouyang, Y. and Li, X. "On the Propagation of Traffic Oscillations under Nonlinear Car-Following Laws." In: Proceeding of the NSF CMMI Engineering Research and Innovation Conference, Atlanta, January 2011

55. Ouyang, Y., Li, X. and Peng, F. "Some Notes on Traffic Oscillation Measurements and Simulation." In: Proceeding of the NSF CMMI Engineering Research and Innovation Conference, Honolulu, June 2009

56. Li, X., Peng, F. and Ouyang, Y. "Oscillations in Congested Traffic: Observations and Estimation." In: Proceeding of the 88th TRB Annual Meeting, Washington D.C., January 2009

57. Ouyang, Y. and Li, X. "Order Stability of Supply Chains with General Network Topology." In: Proceeding of the 87th TRB Annual Meeting, Washington D.C., January 2008

58. Li, X., Yang, X. and Cao, J. "A Method for Analyzing Traffic Properties of Urban Lands Based on Mobile Phone Traffic." In: Proceeding of the 1st Chinese ITS Annual Meeting, Shanghai, China, December 2005

Invited Presentations

1. Li, X. & Chen, Z., "Impacts of Automated Vehicles on Mobility and Equity", Southeast Florida FSUTMS (Florida Standard Urban Transportation Model Structure) Users Group Meeting, Jun 18, 2021

2. Li, X. (Keynote Speaker), "Operations and Planning for Connected and Automated Transportation Systems", KES International Multi-conferences on Smart Digital Futures Virtual Conference, June 16, 2021

3. Li, X., "Trade-off Between Safety, Mobility and Stability in Automated Vehicle Following Control: Theories and Field Experiments", TRB Traffic Flow Theory and Characteristics Committee Webinar Series, April 16, 2021

4. Li, X. (Keynote Speaker), "Fleet and Fuel Strategies for Transportation Resilience", 1ST RIDNAIC International Journal Virtual Summit, March 16, 2021

5. Li, X., "An Empirical Study on Fuel Consumption and Emissions of Commercial Automated Vehicles with Different Headway Settings", International Conference on Applied Energy, December 8, 2020

6. Li, X., "Trade-off between safety, mobility and stability in automated vehicle following control: Theories and field experiments", TU Delft TRAIL Webinar, December 2, 2020

7. Li, X., "Empirical Issues in Planning for Connected and Automated Vehicles (CAV)", International Chinese Transportation Professionals Association US Chapter Joint Webinar, October 30, 2020

8. Li, X., "NSF Proposal Writing Tips", University of Washington, September 25, 2020

9. Li, X., "Empirical Issues in Planning for Connected and Automated Vehicles (CAV)", Central Florida Transportation Planning Group (CFTPG) 2020 Meeting on Accelerating the CAV Industry in Central Florida, August 11, 2020. (over 360 attendees; Li serving as a panelist besides the presentation)

10. Li, X., "Manage of Connected and Automated Transportation Systems", Oregon DOT, June 18, 2020

11. Li, X., "Real-World Trajectory Extraction from Aerial Videos – A Comprehensive and Effective Solution", Drone Technologies, Education, Training, Research, And Applications Conference, February 21, 2020

12. Li, X., "Manage of Connected and Automated Transportation Systems", University of Utah & Utah DOT, January 28, 2020

13. Li, X., "Modeling and Field Experiments on Lane Changing of Autonomous Vehicles in Mixed Traffic", AHB45 Workshop: The Advancement of Modelling Connected and Automated Vehicles: Past and Future, 2020 Transportation Research Board Annual Meeting, January 12, 2020

14. Li, X., "Trajectory Planning for Connected Autonomous Modular Vehicles: Theory, Modeling and Experiments", Distinguished Seminar Series, Department of Civil & Environmental Engineering, Northeastern University, January 6, 2020

15. Li, X., "Trajectory Planning for Autonomous Modular Vehicles Docking Operations", TUM-CREATE, Singapore, December 5, 2019

16. Li, X., "Operational Design and Trajectory Planning of Modular Vehicles", Department of Civil & Environmental Engineering, National University of Singapore, Singapore, December 5, 2019

17. Li, X., "Control of Connected, Automated and Modular Vehicles: Theory, Algorithms, Data and Field Experiments", Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, October 31, 2019

18. Li, X., "Control of Connected Autonomous Vehicles in Mixed Traffic: Modeling, Data Analysis and Field Experiments", USF AI+X Seminar Series, University of South Florida, Oct 18, 2019

19. Li, X., "Trajectory Planning for Connected Autonomous Modular Vehicles: Theory, Modeling and Experiments", Department of Architecture and Civil Engineering, Chalmers University of Technology, July 30, 2019

20. Li, X., "Design Corridor Systems with Modular Vehicles Enabling En-route Docking", Department of Architecture and Civil Engineering, 19th COTA International Conference of Transportation Professionals, Nanjing, China, July 5, 2019

21. Li, X., "Planning with Autonomous Vehicles", Florida Department of Transportation Turnpike Headquarters, Orlando, May 30, 2019

22. Bertini, R., Li X. and Lin, P. "Technology Applications, Partnerships/Collaboration and Research Solutions to Achieve Safety and Mobility Benefits", Florida Department of Transportation State Materials Office Show Case Meeting, Gainesville, April 12, 2019

23. Li, X., "Planning with Autonomous Vehicles", Florida Department of Transportation District 7 Tampa Bay Regional Transportation Analysis (TRT) meeting, Tampa, February 21, 2019

24. Li, X., "Planning with Autonomous Vehicles", Florida Department of Transportation District 7 Planning Office Meeting, Tampa, February 12, 2019

25. Hong, F., Yun, L. and Li, X., "Linear-Time Sweeping Algorithm for Discretization of Continuum Approximation", Presented at the INFORMS Annual Meeting, Phoenix, November 7, 2018

26. Zhao, D. and Li, X., "Online Demand-Driven EV Sharing Management", Presented at the INFORMS Annual Meeting, Phoenix, November 6, 2018

27. Chen, Z., Li, X. and Zhou, X., "Management of Shuttle Systems with Modular Vehicles under Oversaturated Demand", Presented at the INFORMS Annual Meeting, Phoenix, November 4, 2018

28. Li X. "Operations of Modular Vehicles under Oversaturated Traffic", Department of Civil & Coastal

Engineering , Gainesville, October 23, 2018

29. Li X. (Spotlight Session Speaker) "Operational Design for Shuttle Systems with Modular Vehicles under Over-saturated Traffic: Discrete and Continuous Modeling Methods", 18th COTA International Conference of Transportation Professionals, Beijing, China, June 7, 2018

30. Li X., "A Mixed Traffic Capacity Analysis and Lane Management Model", School of Traffic and Transportation, Beijing Jiaotong University, Beijing, China, June 7, 2018

31. Li X., "Towards Faster, Greener and Safer Transportation – Autonomous, Electric and Shared Transportation Systems ", Research Institute of Ministry of Transport, Beijing, China, June 6, 2018

32. Li, X., "A parsimonious model for trajectory smoothing and joint signal optimization with connected automated vehicles", Civil and Environmental Engineering and H. John Heinz III College, Carnegie Mellon University, Pittsburg, July 08, 2018

33. Li, X., "Joint Design of Dispatch Headway and Capacity for a Shuttle System under Over-saturated Traffic", University of Illinois at Urbana-Champaign, Champaign, December 07, 2017

34. Wang, Y. and Li, X., "Passenger Railroad Terminal Simulation & Optimization", Amtrak, DC, August, 2017

35. Li, X., "Traffic Flow Theory Fundamentals", Short Course Chang'an University, China, July 2018

36. Li, X. "Highway traffic smoothing via trajectory control of connected and automated vehicles", Smart Urban Transportation Forum, Institute for Mathematics and its Applications, Minneapolis, May 2017.

37. Li, X. (Keynote Speaker), "Smoothing Traffic with Connected and Automated Vehicles via Trajectory Control", The AAAI'2017 Workshop on Artificial Intelligence for Connected and Automated Vehicles, San Francisco, February 2017

38. Li, X., Amir, G. " Connected Autonomous Vehicles on a Mixed Traffic Highway - Speed Harmonization, Capacity Analysis, and Lane Management", Talking Technology and Transportation (T3e) Webinar. February 8, 2017.

39. Li, X., "Reliable Facility Network Location Design", a Short Course for the Summer OR/SCM Workshop, National Taiwan University, Taiwan, August 2016

40. Li, X., "Traffic Smoothing with Connected Automated Traffic", Chang'an University, China, July 2016

41. Li, X., "Traffic Smoothing with Connected Automated Traffic", Beijing Jiaotong University, China, July 2016

42. Li, X. (Spotlight Speaker), "Traffic Smoothing with Connected Automated Vehicles", the 16th COTA International Conference of Transportation Professionals, Shanghai, July 2016

43. Li, X., Hu, M., Chi, G., "Population-Infrastructure Nexus: A Heterogeneous Flow based Approach for Responding to Interdependent Disruptions to Critical Infrastructure", Presented at The National Workshop on Resilience Research , Washington DC, Oct. 2015

44. Li, X. "Large-scale one-way electric vehicle sharing systems: A continuum approximation model", Presented at International Conference on Operations Excellence & Service Engineering, Orlando, Sept 2015

45. Zhou, F. , Li, X. and Ma, J. "Automated Vehicle Trajectory Control v.s. Classic Traffic Flow Theories", Presented at Automated Vehicles Symposium – Drivers Vehicles Infrastructure, Ann Arbor, July 2015

46. Ma, J., Li, X., Zhou, F., Hu, J. and Park, B. "Vehicle Trajectory Optimization on a transfized Highway

Segment", Presented at Automated Vehicles Symposium – Drivers Vehicles Infrastructure, Ann Arbor, July 2015

47. Li, X., Ma, J. and Zhou, F. "Location Problem for Interdependent Critical Infrastructure Networks under Disruption Risks." Presented at the INFORMS Annual Meeting, San Francisco, November 2014

48. Xie, S., Li, X. and Ouyang, Y. "Decomposition of Facility Disruption Correlations via Augmentation of Virtual Supporting Stations." Presented at the INFORMS Annual Meeting, San Francisco, November 2014

49. Li, X., Ouyang Y., and Peng, F. "Reliable Infrastructure Location Design under Interdependent Disruptions." Presented at the INFORMS Annual Meeting, Minneapolis, October 2013

50. Yun, L. and Li, X. "Reliability Model for Facility Location Design under Imperfect Information." 2nd International Transportation PhD Student Symposium, University of Illinois at Urbana-Champaign, September 2013

51. "Integrated Design of Logistics Networks with Expedited Shipments." 2nd International Transportation PhD Student Symposium, University of Illinois at Urbana-Champaign, September 2013

52. Li, X. "Reliable Traffic Sensor Network Design under Probabilistic Failures." Department of Civil Engineering and Engineering Mechanics University of Arizona, April 2013

53. Li, X. "Reliable Infrastructure Network Location Design under Probabilistic Disruptions." Department of Civil, Structural and Environmental Engineering, University at Buffalo, the State University of New York, April 2013

54. Li, X. "Traffic Sensor Network Design under Probabilistic Failures." Department of Civil & Environmental Engineering, University of Virginia, March 2013

55. Li, X. "At a Glance: Transportation Engineering and Some Research Frontiers." School of Civil Engineering, Lanzhou University of Technology, China, December 2012

56. Li, X. "Models for Connected Infrastructure Network Design." Doctoral Annual Symposium on Transportation Science and Engineering, Harbin Institute of Technology, China, December 2012

57. Li, X. "Location Models for Reliable Infrastructure Systems." School of Economics and Management, Beijing University of Aeronautics and Astronautics, China, December 2012

58. Li, X. "Location Models for Reliable Infrastructure Systems." School of Traffic and Transportation, Beijing Jiaotong University, China, December 2012

59. Li, X. "A supporting station model for reliable infrastructure location design under interdependent disruptions." Department of Civil Engineering, Saint Louis University, September 2012

60. Li, X. "Reliable Facility Location Design under Probabilistic Disruptions." Transportation Work Group, Bagley College of Engineering, Mississippi State University, February 2012

61. Li, X. "Reliable Traffic Sensor Location Design under Probabilistic Disruptions." Department of Civil and Environmental Engineering, Mississippi State University, June 2011

62. Li, X. "Reliable Transportation Information Infrastructure Systems." Department of Civil and Environmental Engineering, Rutgers University, New Brunswick, May 2011

63. Li, X. "Reliable Logistics and Transportation Systems." Kühne Logistics University, Hamburg, Germany, February 2011

64. Li, X. "Selected Topics in Logistics Optimization, Transportation System Analysis and Simulations."

Champaign Simulation Center, Caterpillar Inc., Champaign, December 2010

65. Li, X. and Ouyang, Y. "Reliable Facility Location under Correlated Disruptions: A Continuum Approximation Approach." Presented at the INFORMS Annual Meeting (Invited), San Diego, October 2009

Other Presentations

1. Li, X., Wang, Z., Zhao, X. and Xu., Z. "Vehicle Trajectory Optimization at a Signalized Intersection in Mixed Traffic: Model and Field Experiments", International Symposium on Transportation Data & Modeling (ISTDM2021), June 22, 2021

2. Li, Q., Li, X., and Yao, H. "Autonomous Vehicle Identification Based on Car-Following Data", International Symposium on Transportation Data & Modeling (ISTDM2021), June 22, 2021

3. Li, X., Li, Q., Huang, Z., Halkias, J., & McHale, G. " Lane Changing Maneuver for Autonomous Vehicle in Mixed Traffic." Presented at the 2020 TRB Workshop on Traffic Simulation and Connected and Automated Vehicle (CAV) Modeling, November 17, 2020.

4. Shi, X. & Li, X. "Speed Planning for an Autonomous Vehicle with Conflict Moving Objects", 24th International Conference Of Hong Kong Society For Transportation Studies, Hong Kong, China, December 14, 2019

5. Chen, Z. & Li, X. "Designing Corridor Systems with Modular Vehicles Enabling En-route Docking: Continuous and Discrete Modeling Methods", Presented at the INFORMS Annual Meeting, Seattle, October 21, 2019

6. Wang, Y. & Li, X. "Longitudinal Trajectory Control of Connected Autonomous Vehicle with Deep Reinforcement Learning", Presented at the INFORMS Annual Meeting, Seattle, October 22, 2019

7. Soleimaniamiri, S. & Li, X. "Scheduling of Heterogeneous Connected Automated Vehicles At a General Conflict Area", Presented at the INFORMS Annual Meeting, Seattle, October 22, 2019

8. Liu, H., Li, X. Soleimaniamiri, S. & Xie, S., "Discrete Network Location and Assignment Model Under Cooperative Coverage in Fire Service", Presented at the INFORMS Annual Meeting, Seattle, October 23, 2019

9. Zhao, D. & Li, X. "Large Electric Vehicle Sharing Fleet Management System Interfacing Transportation and Power Systems", Presented at the INFORMS Annual Meeting, Seattle, October 23, 2019

10. Li, X. & Wang., Z. "CAV Trajectory Control in Mixed Traffic at a Signalized Intersection– Learning-based Model and Field Experiments", ASCE International Conference on Transportation & Development, DC, June 11, 2019

11. Li, X. & Zhao., D., "Video-based Intelligent Road Traffic Universal Analysis Tool (VIRTUAL)", Quality Counts, LLC, Tampa, June 7, 2019

12. Li, X., "Autonomous Vehicles", Hunters Green Elementary School, Tampa, May 7, 2019

13. Li X. "Control of Connected Autonomous Vehicles in Mixed Traffic: Modeling and Field Experiments", Center for Urban Transportation Research Webcast series, April 25, 2019

14. Zhao, D. and Li X., "Online Demand Driven Car Sharing Rebalancing", Presented at the INFORMS Annual Meeting, Phoenix, November 7, 2018

15. Hua, Y., Zhao, D., Wang, X. and Li X., "Dynamic Electrical Vehicle Sharing System Design", Presented at the INFORMS Annual Meeting, Phoenix, November 5, 2018

16. Li X. "CAV Trajectory Optimization and Capacity Analysis", Center for Urban Transportation Research

Webcast series, August 23, 2018

17. Ghiasi, A., Hussain, O., Li, X., Qian, S. "A Mixed Traffic Capacity Analysis and Lane Management Model for Connected Automated Vehicles: A Markov Chain Method", International Conference on Transportation & Development 2018, Pittsburg, July 18, 2018

18. Pi, X., Qian, S.Z., Li, X., "A Stochastic Optimal Control Approach for Real-Time Routing of Connected Automated Vehicles", International Conference on Transportation & Development 2018, Pittsburg, July 17, 2018

19. Soleimaniamiri, S, Li, X., Wang, Y. "Scheduling of Heterogeneous Connected Automated Vehicles at a General Conflict Point", 2018 Automated Vehicle Symposium, San Francisco, July 10, 2018

20. Wang, Y., Li, X., "Trajectory Control of Mixed Traffic with Machine Learning", 2018 Automated Vehicle Symposium, San Francisco, July 9, 2018

21. Wang, Y., Li, X., "Mixed Traffic Longitudinal Trajectory Control at Isolated Signalized Intersections", 2018 Automated Vehicle Symposium, San Francisco, July 9, 2018

22. Pinjari, A., Zhao, D., Balusu, S., Sheela, P., Li X., Eluru, N., Tabatabaee, F., "Estimation of Truck Counts with Multiple Truckload Categories: A Data-Fusion Approach and a Case Study in Florida", 7th Innovations in Travel Modeling Conference, Atlanta GA. June 27, 2018

23. Li X., "CAV Trajectory Optimization & Capacity Analysis - Modeling Methods and Field Experiments", 7th Innovations in Travel Modeling Conference, Atlanta GA. June 25, 2018

24. Ghiasi, A. and Li, X. "A Mixed Traffic Capacity Analysis & Lane Management Model for Connected Automated Vehicles: A Markov Chain Method", 5th Annual UTC Conference for the Southeastern Region, Gainesville, FL, 11/16/2017.

25. Zhao, D. and Li, X. "Electric Vehicle Sharing Based "Energy Sponge" Service Interfacing Transportation & Power Supply", 5th Annual UTC Conference for the Southeastern Region, Gainesville, FL, 11/16/2017.

26. Zhao, D. and Li, X. "Joint Electric Vehicle Sharing and Vehicle2grid Service System Operations", INFORMS Annual Meeting, Huston, October 2017.

27. Li, X., Ghiasi, A. and Qu, X. "Joint Optimization of Trajectory and Signal Timing for Connected Automated Traffic", 9th 9th International Workshop on Computational Transportation Science, Lanzhou, China, July 14, 2017

28. Li, X., "Carsharing Systems & Electric Vehicles", Uber, San Francesco, July, 11 2017

29. Ghiasi, A. and Li, X., "A Mixed Traffic Capacity Analysis and Lane Management Model for Connected Automated Vehicles: A Markov Chain Method", The Automated Vehicles Symposium, San Francesco, July, 2017

30. Yun, L., Fang, H. and Li, X., "Reliable Facility Location Design with Imperfect Information: Continuum and Discrete Models", Presented at INFORMS First Triennial Conference, Chicago, July 2017.

31. Parsafard, M., Li, X., Wang, Z., Lin P.-S., "Deployment Of Patrolling And Stationary Service Vehicles For Freeway Incident Management", Presented at the INFORMS Annual Meeting, Nashville, November 2016

32. Li, X., "An improved shooting heuristic algorithm for optimizing trajectories of connected automated vehicles", Presented at the Traffic Flow Theory and Characteristics Committee (AHB45), 2016 Summer Meeting, Sydney, July 2016

33. Huang, Y., Li, X., Jiang, R, and Hu M. "Frequent domain predictability of traffic oscillation: Field experiments and statistics analysis." Presented at the Traffic Flow Theory and Characteristics Committee (AHB45), 2016 Summer Meeting, Sydney, July 2016

34. Li, X., Zhao, M., Cui, J., and Parsafard, M. "Reliable Supply Chain Design with Expedited Shipment Service." Presented at the INFORMS Annual Meeting, Philadelphia, November 2015

35. Li, X., Cui, J., Ghiasi, A., Ma, J. and Zhou, F. "A Continuum Approximation Model for Electric Vehicle Sharing." Presented at the INFORMS Annual Meeting, Philadelphia, November 2015

36. Ghiasi, A., Chi, G., Li, C., and Li, X., "Characteristic Associated with the Location of Organic and Local Food Stores." Presented at the INFORMS Annual Meeting, Philadelphia, November 2015

37. Parsafard, M., Chi, G. and Li, X., "Time Geography Based Mobility Measures for Geo-tagged Twitter Data." Presented at the INFORMS Annual Meeting, Philadelphia, November 2015

38. Zhou, F. , Li, X. and Ma, J. "A Parsimonious Two-way Shooting Algorithm for Connected Automated Traffic Smoothing: Computational Issues and Optimization", Presented at Automated Vehicles Symposium – Drivers Vehicles Infrastructure, Ann Arbor, July 2015 *(Receiving the Best Research Poster Award)*

39. Parsafard, M., Chi, G. and Li, X. "Evaluating Social Media Data Appropriateness for Travel Demand Analysis: A Time Geography Approach." Presented at the INFORMS Annual Meeting, San Francisco, November 2014

40. Zhou, F., Ma, J., and Li X. "Vehicle Pre-clustering: An Intersection Control Strategy with Emerging Communication and Control Technologies." Automated Vehicles Symposium – Drivers Vehicles Infrastructure, San Francisco, July 2014.

41. Marufuzzaman M., Eksioglu S.D., Li X., Wang J. "Analyzing the Impact of Intermodal Hub Disruption in Biofuel Supply Chain Network." NCITEC Annual Conference, Starkville, MS, November 2013. (Placed 1st in the Student Poster Competition)

42. Yun, L., Ji, C., Li, X., and Fan, H. "A Reliability Model for Facility Location Design under Imperfect Information." NCITEC Annual Conference, Starkville, MS, November 2013.

43. Zhang, L., Li X. and Wen, Y. "Dynamic Vehicle Routing for Transit Evacuation System." NCITEC Annual Conference, Starkville, MS, November 2013.

44. Li, X., Medal, H. and Wang, J. "Infrastructure Network Design under Additive Service Utilities." Presented at the INFORMS Annual Meeting, Minneapolis, October 2013

45. Medal, H. and Li, X. "Optimizing the Mobility and Safety of Walk-and-Ride Systems." Presented at the INFORMS Annual Meeting, Minneapolis, October 2013

46. Marufuzzaman, M., Eksioglu, S., Li, X. and Wang, J. "Models for Designing Reliable Biofuel Supply Chains." Presented at the INFORMS Annual Meeting, Minneapolis, October 2013

47. Jin, M., Al-Khaled, A. and Li, X. "Evaluating Criticality of Intermodal Network Infrastructures Using Flow Optimization." Presented at the INFORMS Annual Meeting, Minneapolis, October 2013

48. Li, X. "An Integrated Supply Chain Network Design Model with Expedited Delivery Options." Presented at the INFORMS Annual Meeting, Phoenix, October 2012

49. Li, X., Peng, F., Ouyang, Y. "Reliable Infrastructure Location Design under Interdependent Disruptions Caused by Supporting System Failures." Presented at the INFORMS Annual Meeting, Phoenix, October 2012

50. Hajibabaia, H., Saat, M.R., Ouyang, Y., Barkan, C.P.L., Yang, Z., Bowling, K., Somani, K., Lauro, D., and Li, X. "Wayside Defect Detector Data Mining to Predict Potential WILD Train Stops." Presented at the Annual Conference and Exposition of the American Railway Engineering and Maintenance-of-Way Association (AREMA), Chicago, IL, September 2012.

51. Li, X., Zhang, L. "Transit Evacuation and Connected Vehicles" Presented at the National Rural ITS Conference and Gulf Region ITS Annual Meeting, Biloxi, September 2012
52. Benanzer, T., Li, X. and Ha, C. "Logistics Warehouse Layout Design." Presented at the INFORMS Annual Meeting, Charlotte, November 2011
53. An, S., Cui, N., Li, X. and Ouyang, Y. "Emergency Rescue Location Planning under the Risk of Probabilistic Disruptions." Presented at the INFORMS Annual Meeting, Charlotte, November 2011
54. Li, X., Wang, X. and Ouyang, Y. "Empirical Validation of Traffic Oscillation Growth under Nonlinear Car-following Behavior." Presented at the INFORMS Annual Meeting, Charlotte, November 2011
55. Chen, Q., Li, X. and Ouyang, Y. "Joint Inventory-location Problem under the Risk of Probabilistic Facility Disruptions." Presented at the INFORMS Annual Meeting, Charlotte, November 2011
56. Li, X. and Ouyang, Y. "Traffic Sensor Deployment under Probabilistic Disruptions and Generalized Surveillance Effectiveness Measures." Presented at the INFORMS Annual Meeting, Austin, November 2010
57. Li, X. and Ouyang, Y. "A Continuum Approximation Approach to Reliable Traffic Sensor Deployment on Highway Corridors." Presented at the INFORMS Annual Meeting, Austin, November 2010
58. Li, X. and Ouyang, Y. "Characterization of Traffic Oscillation Propagation under Nonlinear Car-Following Laws." Presented at the INFORMS Annual Meeting, Austin, November 2010
59. Li, X., Peng, F., Bai, Y. and Ouyang, Y. "The Effects of Operational Disruptions on Biorefinery Location Design." Presented at the INFORMS Annual Meeting, Austin, November 2010
60. Peng, F., Kang, S., Li, X., Ouyang, Y., Somani, K., and Acharya, D. "A Heuristic Approach to Railroad Track Maintenance Scheduling Problem." Presented at the 2010 Joint Rail Conference, Urbana, Illinois, April 2010
61. Li, X. and Ouyang, Y. "Reliable Sensor Location for Network Traffic Surveillance." Presented at the INFORMS Annual Meeting, San Diego, October 2009
62. Peng, F., Li, X. and Ouyang, Y. "Multi-year Installation Design of Railroad Wayside Defect Detection Installations." Presented at the INFORMS Annual Meeting, San Diego, October 2009
63. Nourbakhsh, S.M., Li, X. and Ouyang, Y. "Stability Analysis of Traffic Trajectory Data." Presented at the INFORMS Annual Meeting, San Diego, October 2009
64. Li, X., Peng, F. and Ouyang, Y. "A Frequency-Domain Approach to Traffic Oscillation Measurements." Presented at the INFORMS Annual Meeting, Washington, D.C., October 2008
65. Peng, F., Somani, K., Kang, S., Li, X. and Ouyang, Y. "Scheduling Track Maintenance at CSX Transportation." Presented at the INFORMS Annual Meeting, Washington, D.C., October 2008
66. Li, X. and Ouyang, Y. "Optimal Sensor Deployment for Traffic Monitoring in Large-scale Transportation Networks: A Preliminary Study." Presented at the NEXTRANS Center Inaugural Summit, Purdue University, May 2008
67. Ouyang, Y. and Li, X. "Order Stability in Supply Chain Networks." Presented at the INFORMS Annual Meeting, Seattle, November 2007

RESEARCH REPORTS
1. Lu, X., Liu, H., Li, X., Li, Q., Mahmassani, H., Talipour, A., Hosseini, M., Huang Z., Hale D.K., Shladover, S.E., "Developing Analysis, Modeling, and Simulation Tools for Connected and Automated Vehicle Applications." Federal Highway Administration. Report No. FHWA-HOP-20, 2021
2. Hale, D.K., Li, X., Ghiasi, A., Zhao, D., Khalighi, F., Aycin, M. "Trajectory Investigation for Enhanced Calibration of Microsimulation Models." Report No. FHWA-HRT, 2021
3. Li, X. "Intermodal Logistic System Network Design with Expedited Transportation Services." National Center for Intermodal Transportation for Economic Competitiveness. Report No. NCITEC-2013-22. March 2016

4. Zhou, F., Marufuzzaman, M., Li, X. and Eksioglu, S. "Analyzing the Impact of Intermodal-Related Risk to the Design and Management of Biofuel Supply Chain." Mississippi State Department of Transportation. Report No. FHWA/MS-DOT-RD-14-259. January 2015
5. Li, X., Choi, E. and Ouyang, Y. 2010 "Sensor Network Design for Multimodal Freight Transportation System." NEXTRANS Project No 012IY01. USDOT Region V Regional University Transportation Center. July 2009

REASEARCH PROJECTS

· **Federal Funds**

Sponsor	Title	Role	Period	Total	Li's portion
USDOT	National Center for Congestion Reduction	PI	09/19-09/23	$10,000,000 (plus $10,000,000 state and local matching)	
DOE	Visual-Enhanced Cooperative Traffic Operations (VECTOR) System	PI	01/22-04/25	$3,500,000 (plus $2,589,321 state and local matching)	
National Science Foundation (NSF)	CPS: Small: Cyber-Physical Phases of Mixed Traffic with Modular & Autonomous Vehicles: Dynamics, Impacts and Management	Sole PI	01/20-12/22	$500,000	
NSF	EAGER/Collaborative Research: Enable Elastic Capacity for Transportation Infrastructure through a Transmodal Modular Autonomous Vehicle System	Lead PI Collaborator: Joseph Chow from NYU	09/20-08/22	$300,000	
NSF	CRISP Type 2: Collaborative Research: Harnessing Interdependency for Resilience: Creating an "Energy Sponge" with Cloud Electric Vehicle Sharing	Lead PI Collaborators: Xin Wang, Kaibo Liu, Emilia Tjernstroem, Feng Ju, Jianhui Wang	09/16-8/22	$1,686,426	
NSF	Collaborative Research: CRISP Type 1: Self-Organized Infrastructure-	Lead PI Collaborator: Mengqi Hu,	01/16-12/19	$500,000	

	Population Nexus — A Distributed Heterogeneous Flow-based Modeling Framework	Guangqing Chi,			
NSF	CAREER: Pathway to a Driverless Highway Transportation System: A Behavior Analysis and Trajectory Control Approach	Sole PI	07/15-06/20	$500,000	
NSF	Collaborative Research: Planning Reliable and Resilient Transportation Networks against Correlated Infrastructure Disruptions	Lead PI Collaborator: Yanfeng Ouyang	09/12-08/17	$349,586	
USDOT SBIR (co-sponsored by Connected Wise LLC and I-4 Corridor Program)	On-board Smart Vision System to Support Vehicle to Infrastructure (V2I) Communication	USF PI Collaborator: Pei-Sung Lin	09/19-11/21	$950,000	$300,000
USDOT FHWA (collaborate with Leidos Inc.)	FHWA Cooperative Automation Research: CARMA Proof-of-Concept TSMO Use Case Testing	PI	11/19-12/21	$189,636	
USDOT FHWA (collaborate with WSP Inc.)	Automated Vehicle Access, Mobility, And Affordability for System Users	PI	10/19-12/21	$150,000	
USDOT FHWA (collaborate with Leidos Inc.)	Trajectory Investigation for Enhanced Microsimulation Calibration Guidance	PI	10/18-10/20	$75,575	
USDOT FHWA (collaborate	Developing Analysis, Modeling, and Simulation (AMS) Tools for	PI	10/17-10/20	$45,000	

with Leidos Inc.)	Connected and Automated Vehicle (CAV) Applications				
USDOT FHWA (collaborate with Leidos Inc.)	Transportation Systems Simulation Manual	Co-PI Collaborator: Robert Bertini	09/16-12/17	$57,501	$15,045
USDOT FHWA (collaborate with Leidos Inc.)	Speed Harmonization Fundamental Research: Phase II	PI	09/15-05/16	$40,500	
USDOT FHWA (collaborate with Leidos Inc.)	Speed Harmonization Fundamental Research	PI Collaborator: Li Zhang	01/15-08/15	$50,738	
USDOE (Department of Energy)	Florida Statewide Alternative Fuel Resiliency Plan	Co-PI Collaborators: Debbie Bass, Caley Johnson, Alexander Kolpakov, Doug Kettles, Carlos Colon	09/19-08/22	$700,000	$74,983
Total				**$19,545,326 (Li as the PI for $17,887,461; additionally with $12, 589,321 match)**	

·

· **State, Local and University Funds**

Sponsor	Title	Role	Period	Total	Li's portion
Florida Department of Transportation	Infrastructure Enablers for Reliable Cooperative Driving Automation (CDA) Phase I: Existing Infrastructure Evaluation	PI	1/22-12/22	$120,000	$120,000
Florida Department of Transportation	Evaluating Artificial Intelligence Based Video Analytics Technologies for Better Traffic Management	PI	1/22-12/22	$100,000	$100,000

Florida Department of Transportation	Evaluation of CARMA for I-STREET testbed implementation	Co-PI	9/21-9/22	$95,000	$42,500
Florida Department of Transportation	Measure the effectiveness of safety treatments with video-based vehicle trajectory data	Co-PI	1/22-12/22	$150,000	$50,000
Florida Department of Transportation	USF-CUTR I-4 FRAME Project Before Study: Data Collection and Analysis of Safety and Mobility Conditions Prior to Implementation	Co-PI Collaborators Pei-Sung Lin, Sisinnio Concas	2/21-4/22	$ 281,019	$80,750
Florida Department of Transportation	Identify Sources and Risks on Cybersecurity for Connected Vehicle Infrastructures	Co-PI Collaborators Pei-Sung Lin, Jay Lagatti	6/20–12/21	$152,990	$41,750
Florida Department of Transportation	Toward a Florida Automated, Connected, Electric and Shared (ACES) Transportation Road Map	Co-PI	11/18–11/20	$200,000	$20,000
NICR (UTC)	Transit Priority	PI	9/20 – 9/21	$99,634	
CTECH (UTC)	Vehicle-based Sensing for Energy and Emission Reduction	PI	4/20-9/21	$100,000	
University of South Florida	Equipment Proposal: A Light Version of USF Testbed for Connected and Autonomous Vehicles	PI	12/18-12/19	$118,900	
Florida Department of Transportation	Modelling Commercial Vehicle Empty Trips With Parameters That Depend On Trip Characteristics	Co-PI Collaborator: Abdul Pinjari	1/16 – 12/17	$124,568	$24,937
Florida Department of Transportation	Optimization of Road Rangers Operations for FDOT District 7 Freeway Systems	Senior Personnel Collaborators: Pei-Sung Lin, Zhenyu Wang	12/15 – 06/16	$49,250	$11,672
CTEDD (UTC)	Incorporating mixed automated vehicle traffic in capacity analysis and system	PI Collaborator: Yujie Hu	2/19-2/20	$35,000	

CTECH (UTC)	Demand-Driven Operational Design for Greener and More Equitable Shared Mobility	PI Collaborator: Samitha Samaranayake	10/18-9/19	$65,782	
CTECH (UTC)	Measuring Impact of Emerging Transportation Technologies on Community Equity in Economy, Environment and Public Health	PI Collaborator: Yu Zhang, Amy Stuart	11/17-12/18	$80,179	
CTECH (UTC)	Electric Vehicle Sharing Planning and Operations	PI	11/16-11/17	$30,000	
Hearin Foundation	Mississippi Transportation Infrastructure Improvement Opportunities and Funding Mechanisms	Co-PI Collaborator: Hugh Medal	01/15-12/15	$105,523	$75,000
Mississippi Department of Transportation	Origin Destination (O-D) and Travel Time (TT) Data	Co-PI Collaborator: Li Zhang	05/14-06/15	$100,000	$50,000
National Center for Intermodal Transportation for Economic Competitiveness (NCITEC)	Intermodal Logistic System Network Design with Expedited Transportation Services	PI	08/13-12/15	$65,863	
Office of Research and Economic Development, (ORED), MSU	Research Group Proposal: Big Data Analysis in Transportation and Sociology	PI	12/13-12/14	$2,000	
ORED	Research Group Proposal: Infrastructure and Livable Community	PI	12/12-12/13	$2,000	
NCITEC	Optimizing the Mobility and Safety of Walk-and-Ride Systems	Co-PI Collaborator: Hugh Medal	08/13-07/15	$99,954	$44,918
NCITEC	Analyzing the Impact of Intermodal-Related Risk to the Design and Management of Biofuel Supply Chain	Co-PI Collaborator: Sandra Eksioglu	08/12-12/14	$100,911	$46,158

Mississippi Department of Transportation	Analyzing the Impact of Intermodal-Related Risk to the Design and Management of Biofuel Supply Chain	PI Collaborator: Sandra Eksioglu	08/12-12/14	$99,642	
NCITEC	Real-Time Transit Vehicle Routing Optimization in Intermodal Emergency Evacuations	Co-PI Collaborator: Li Zhang	08/12-12/13	$100,905	$30,272
NCITEC	Intermodal Transportation Systems Risk Analysis and Resilience in New Madrid Seismic Zone: the Impact to Mississippi	Co-PI Collaborator: Li Zhang	08/12-12/14	$96,810	$29,043
Total				**$2,575,930**	

INDUSTRY EXPERIENCE

Research Analyst   **Caterpillar Inc., Champaign IL, Feb. 2011 – Dec. 2011**
- Develop supply chain and manufacture line optimization algorithms and tools
- Develop multidisciplinary design optimization systems

Intern   **Beijing, China, Summer 2005**
- Participated in project scheduling for the Center of No. 10 Subway Construction.

SYNERGISTIC ACTIVITIES

Education & Outreach
- Ghiasi Amir and Xiaopeng Li "Connected Autonomous Vehicles (CAV) on a Mixed Traffic Highway – Speed Harmonization, Capacity Analysis, and Lane Management". T3e Webinar Series. Intelligent Transportation Systems Joint Program Office, US DOT. February 2017 https://www.pcb.its.dot.gov/t3/s170208_Connected_Autonomous_Vehicles_on_Mixed_Traffic_Highway.asp. (Introducing concepts and recent developments of CAV traffic; over 200 attendees from Federal and State Department of Transportation, Metropolitan Planning Organization, Public Transportation/Transit Agency, Consulting firms, universities etc.)

- 4th Intelligent Transportation Systems (ITS) University Education Workshop, ITS America, Washington DC, September 2016. (Participating in discussion on the ITS curriculum development facing new transportation opportunities and challenges)

- National Effective Teaching Institute workshop, American Society of Engineering Education, Tampa, January 2012

Editorship
- Associate Editors,
    - o   IEEE Transactions on Intelligent Transportation System, 2021-present
    - o   IEEE-Intelligent Transportation Systems Magazine, 2021 - present
    - o   Cleaner Logistics and Supply Chain, 2021 – present
    - o   IISE Transactions, Department of Transportation Systems Analysis, 2014 - present.

- Editorial Board Member,
    o Transportation Research Part B, Jan 2017 – present
    o Transportation Research Part C, March 2017 – present
    o Transportation Research Part E, June 2020 – present
    o Communications in Transportation Research, May 2021 – present
    o The ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, June 2020 – present
- Guest Editors,
    o (Lead) IEEE Intelligent Transportation Systems Magazine, Special Issue on Emerging Mobility Systems, 2017-2018
    o Transportation Research Part C, Special Issue on Modeling and managing mixed traffic with human-driven and automated vehicles, 2018-2020
    o Journal of Advanced Transportation, Special Issue on Advances in Modelling Connected and Automated Vehicles, 2016-2017
    o Journal of Advanced Transportation, Special Issue on Advances in Modelling Connected and Automated Vehicles, 2016-2017
- Area Editor, the COTA International Conferences of Transportation Professionals

Service
- Committee Chairs and Memberships
    – Founding Chair, Emerging Transportation Technology Testing, IEEE Intelligent Transportation Systems Society (ITSS), from September 2021 (expected)
    – Chair of SIG C1 Traffic Theory and Modelling, World Conference for Transport Research Society (WCTRS), 2017
    – Member, Transportation Network Modeling Committee (AEP40), Transportation Research Board, 2015-present.
    – Member, Traffic Flow Theory and Characteristics Committee (ACP50), Transportation Research Board, 2016-present.
    – Member, Cooperative Driving Automation (CDA) Committee, Society of Automotive Engineers, 2021-present
    – Member, Artificial Intelligence Committee, ASCE Transportation & Development Institute (T&DI), 2020-present
    – Railroad Applications Section (RAS), Institute of Operations Research and Management Science (INFORMS), 2013-2015 (serving as the 2014 Problem Solving Competition (PSC) Chairman and the 2015 Public Relation Officer)
    – Member, CARMA Working Group, USDOT, 2019-Present
- Session Chairs
    – 2016, 2017 Automated Vehicles Symposium, Breakout Sessions (Sponsored by TRB AHB 45 TFTC committee), San Francisco
    – 2018 Automated Vehicles Symposium, Breakout Session: From Automated Vehicles to Automated Transportation Systems (Sponsored by ASCE), San Francisco
    – INFORMS Annual Meeting, 2009 (San Diego), 2010 (Austin), 2012 (Phoenix), 2013 (Minneapolis), 2014 (San Francisco).
    – Session of Intermodal Transportation of Freight and People, Mississippi Department of Transportation Research Needs Workshop, Mississippi State, February 2012
- Panelists
    – NSF Review Panels, Civil Infrastructure Systems Program, 2013, 2015, 2016, 2017, 2020; Cyber Physical Systems Program, 2015, 2020; EPSCoR, 2018, Leap HI, 2020, 2021; CBET, 2019; HDR,

2019
- CARMA Cooperative Driving Automation (CDA) Panel, ITS All Access Meetings, September 24, 2020
- The AAAI'2017 Workshop on Artificial Intelligence for Connected and Automated Vehicles, San Francisco, February 2017
- Education Panelist, Florida Simulation Summit, the National Center for Simulation Orlando, September 2015.
- Integrated Traffic Flow Models and Analysis for Automated Vehicles Breakout Session, Automated Vehicles Symposium – Drivers Vehicles Infrastructure, Ann Arbor, July 2015
- Traffic Signal Control with Connected and Automated Vehicles Breakout Session, Automated Vehicles Symposium – Drivers Vehicles Infrastructure, Ann Arbor, July 2015
- Professional Society Memberships
  - Transportation Research Board (TRB), 2007 – present
  - Institute for Operations Research and the Management Sciences (INFORMS), 2007 – present
  - Institute of Transportation Engineers (ITE), 2007 – present
  - Member, American Society of Civil Engineers (ASCE), Mar, 2021 – present; Associate Member, ASCE, Jan. 2012 – Mar, 2021;
  - The American Railway Engineering and Maintenance-of-Way Association (AREMA) Student Chapter at UIUC, 2008 – 2011
- University Services
  - Transportation Graduate Coordinator, 2016- present
  - Faculty Advisor, Institute of Transportation Engineers (ITE) Student Chapter at MSU, Spring 2012 – Summer 2015
  - Director, Transportation Working Group, Bagley College of Engineering, MSU, 2013-2015.
  - Member, Strategic Planning Committee, Transportation & Economic Symposium: Transportation for Mississippi's Sustainable Economic Growth, Mississippi State, 2012
  - Vice President, ITE Student Chapter at UIUC, 2008 – 2009
  - Coordinator, Highway Safety Manual (HSM) Lead State Peer to Peer Workshop, Schaumburg, Illinois, November 2010
  - Coordinator, National Safety Performance Function (SPF) Summit, Chicago, Illinois, July 2009

Ad-Hoc Reviewer
- *Annal of Operations Research*
- *Automation in Construction*
- *Computer-Aided Civil and Infrastructure Engineering*
- *Computers & Industrial Engineering*
- *Computers & Geosciences*
- *IEEE Transactions on Intelligent Transportation Systems*
- *International Journal of Information Technology & Decision Making*
- *International Journal of Management Science and Engineering Management*
- *International Symposium on Transportation and Traffic Theory*
- *Journal of Advanced Transportation*
- *Journal of Computing in Civil Engineering*
- *Journal of Intelligent Transportation Systems*
- *Journal of Transportation and Land Use*
- *Journal of Urban Planning and Development*
- *Naval Research Logistics*
- *Networks*
- *Optimization Letters*

- *Operations Research*
- *Plos One*
- *Scientia Iranica*
- *Transportation Research Part B*
- *Transportation Research Part C*
- *Transportation Research Part D*
- *Transportation Research Part E*
- *Transportation Research Part F*
- *Transportation Research Record (Transportation Research Board Annual Meeting)*
- *Transportation Science*

STUDENTS AND SCHOLARS ADVISED

Past Major Advisees
- PhD Graduates
  - Dongfang Zhao, USF, August 2016 – May 2021; Dissertation Title: Electric Vehicle Fleet Management in Transportation and Power Systems
  - Zhiwei Chen, USF, August 2017 – December 2020; Dissertation Title: Design Next-generation Transportation Systems with Emerging Vehicle Technologies; Currently a Postdoctoral Researcher at University of South Florida.
  - Wang Yu, USF, August 2015 – December 2010; Dissertation Title: Trajectory Based Traffic Analysis and Control Utilizing Connected Autonomous Vehicles; Currently a Postdoctoral Researcher at Georgia Tech.
  - Amir Ghiasi, USF, August 2014 – August 2018; Dissertation Title: Connected Autonomous Vehicles: Capacity Analysis, Trajectory Optimization, and Speed Harmonization; Currently work at Leidos, Inc, at the TFHRC Saxton Lab
  - Mohsen Parsafard, USF, August 2013 – August 2017; Dissertation Title: Space-Time Transportation System Modelling: from Traveler's Characteristics to the Network Design Problem; Currently work at Coyote, Inc.
  - Yi Wen, (co-advised with Dr. Zhang Li at MSU), MSU, Spring 2012 - Spring 2015; Engineer in the Virginia Department of Transportation
- MS Graduates
  - Hossein Amiri, May 2021; Thesis Title: Longitudinal Trajectory Tracking Analysis for Autonomous Electric Vehicles Based on PID Control
  - Brian Staes (co-advised with Dr. Robert Bertini), December 2020; Thesis Title: Diagnosis of Freeway Bottlenecks During the Mass Evacuation for Hurricane Irma on Florida's Turnpike Mainline
  - Gangyan Zhang, Fall 2018 – December 2019; Thesis Title: Impact of the Number of Lane-Changing Times on Throughput by Fundamental Diagram Based on NGSIM Data
  - Zhiwei Chen, August 2017 – August 2019; Thesis Title: Exploring the Equity Performance of Bike-Sharing Systems with Disaggregated Data: A Story of Southern Tampa
  - Fang Zhou (female), MSU, January 2014 – August 2015 (female; Software Engineer in Leidos Inc. after graduation)
  - Jin Wang (female), MSU, August 2012 – August 2014 (female; PhD Student at Auburn University after graduation)
- Postdoc Researchers
  - Hongqiang Fan, USF, October 2015 – December 2016 (Faculty at Beijing Post and Telecommunications University)

- o Yanqian Wang, USF, November 2015 – November 2016
- o Parsafard, Mohsen September 2017 – October 2017

Current Advisees
- Postdoc Researchers
  - o Zhiwei Chen, from Jan 2021
  - o Handong Yao, from July 2020
- PhD Students
  - o Eren Yuksel, from Fall 2020 (passed dissertation proposal)
  - o Saeid Soleimaniamiri, from August 2017 (passed dissertation proposal)
  - o Runan Yang (female), from August 2017 (passed dissertation proposal)
  - o Qianwen Li (female), from Fall 2018 (passed dissertation proposal)
  - o Xiaowei Shi, from Fall 2018 (passed dissertation proposal)
  - o Zhaohui Liang, from Spring 2020
  - o Peng Zhang from Spring 2020
  - o Yleana Baez Chiquin (female, Hispanics), from Spring 2021
  - o Keke Long (female), from Fall 2021
  - o Hoora Abootalebi (female), from Fall 2021
  - o Ke Ma, from Fall 2021
  - o Amin Isaai, from Fall 2021

Undergraduate Researchers
- Oleksandr Lisnichenko, Computer Science and Engineering, USF, Spring 2020 - Spring 2021
- Kyle Finch, Mechanical Engineering, USF, Spring 2019 - present
- Tyler Brown, Computer Science and Engineering, USF, Spring 2019– December 2020
- Miracle Oluchi Anyachukwu, CEE, USF, Summer 2017 (female; African American)
- Sabrina Mamo, CEE, USF, Spring 2017 (female; Latino)
- Kamal Taha, CEE, USF, Spring 2017
- John Green, CEE, MSU, Spring 2015 (African American)
- Heather Hart, CEE, MSU, 2014-2015 (female)
- Samantha Frederick, CEE, MSU, 2013 (female)
- Patrick Kuykendall, CEE, MSU, 2013

Visiting Students
USF
- Zhen Wang, PhD Students, Chang'an University, February 2019 – February 2020
- Jun Du, PhD Student, Beijing Jiaotong University, October 2018 – October 2019
- Mingyang Pei, PhD Student, South China University of Technology, October 2018 – October 2019
- Handong Yao, PhD Student, Harbin Institute of Technology, September 2017 – September 2019
- Lina Ma, PhD Student, Harbin Institute of Technology, December 2016 – December 2017
- Lifen Yun, Instructor, Beijing Jiaotong University, October 2015 – December 2016
- Zeng Lu, PhD Student, Beijing Jiaotong University, November 2016 – June 2017
- Yan Xu, PhD Student, Beijing Jiaotong University, September 2015 – September 2016

MSU
- Lifen Yun, Graduate Student, Beijing Jiaotong University, April 2013 – April 2014
- Jiaqi Ma, PhD Candidate, University of Virginia, April 2014 – June 2014

Committee Member
- Zhiqiang Wu, PhD Student,
- Yikang Hua, PhD, ISE UW-Madison, 2021

- Yi Li, PhD, CSE, USF, 2020
- Funke Adeosun, PhD, CEE, USF, 2020
- Sun Liu, PhD, CEE, IMSE, USF, 2020
- Chowdhury Sudipta, PhD, CEE, MSU, 2019
- Yuan Wang, PhD, CEE, USF, 2019
- Eghbal Rashidi, PhD, ISE, MSU, 2016 (Postdoc at Clemson University)
- Mohammad Marufuzzaman, PhD, ISE, MSU, 2015 (Assistant Professor at MSU)
- Zhitong Huang, PhD, CEE 2015 (Engineer in Leidos Inc.)
- Brian Staes, Master, CEE, USF, 2020
- Brian Jordon, Master, CEE, MSU, 2015
- Tasmin Farzana, Master, CEE, MSU, 2013
- Heather Dee Craft, Master, CEE, MSU, 2013
- Gregory J Norwood, Master, CEE, MSU, 2012

External Advisor
- Meng Zhao, PhD Candidate, Harbin Institute of Technology, Fall 2015 – August 2018

Visiting Scholars

USF
- Jie Xiong, Lecturer, Beijing University of Technology, Spring 2019 – Spring 2020
- Jin Zhang , Associate Professor, Qingdao University of Science and Technology, Fall 2015 – Fall 2016
- Tao Wang, Associate Professor, Qingdao University of Science and Technology, Fall 2015 – Fall 2016

MSU
- Junqiang Leng, Associate Professor, Harbin Institute of Technology, Fall 2014– Fall 2015
- Wendong Yang , Associate Professor, Nanjing University of Aeronautics and Astronautics, Fall 2013– Fall 2014