

# Xianyuan Zhan

CURRICULUM VITAE

Institute for AI Industry Research (AIR), Tsinghua University

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## Research Interests

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Offline Deep Reinforcement Learning, Complex System Optimization, Urban Computing, Big data Analytics in Transportation, Intelligent Transportation Systems, Complex Networks

## Education

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### Doctor of Philosophy

Jan. 2013 - Aug. 2017

PURDUE UNIVERSITY

Transportation Systems, Civil Engineering. Advisor: Dr. Satish V. Ukkusuri

### Master of Science

Jan. 2014 - Dec. 2016

PURDUE UNIVERSITY

Computer Science

### Master of Science in Engineering

Aug. 2011 - Dec. 2012

PURDUE UNIVERSITY

Transportation Systems, Civil Engineering

### Bachelor of Engineering

Aug. 2007 - Jul. 2011

TSINGHUA UNIVERSITY

Beijing, China

Civil Engineering

## Professional Experience

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### Research Assistant Professor

Jul. 2021 - Present

TSINGHUA UNIVERSITY

Beijing, China

Institute for AI Industry Research

### Data Scientist

Jan. 2018 - Present

JD TECHNOLOGY

Beijing, China

JD iCity, JD Intelligent City Research

### Research Associate

Aug. 2017 - Jan. 2018

MICROSOFT RESEARCH ASIA

Beijing, China

Urban Computing Group

### Research Assistant

Aug. 2011 - Aug. 2017

PURDUE UNIVERSITY

West Lafayette, US

Lyles School of Civil Engineering

### Teaching Assistant

SPRING 2013, FALL 2015

PURDUE UNIVERSITY

West Lafayette, US

Lyles School of Civil Engineering

### Visiting Research Fellow

May. - Aug. 2015

MICROSOFT RESEARCH ASIA

Beijing, China

Mentor: Dr. Yu Zheng

## Research Assistant

TSINGHUA UNIVERSITY

3S (GNSS/RS/GIS) Research Center

Jun. 2009 - Jan. 2011

Beijing, China

## Honors & Awards

2022	3rd Prize of Wu Wen Jun AI Science & Technology Award	CAAI
2021	Committee Member of Intelligent Vehicles of China Computer Federation (CCF)	CCF
2020	2019 Synced Machine Intelligence Awards: 30 Best AI Use Cases of the Year	SYNCED
2018	Artificial Intelligence Innovation Award	CAIS 2018
2018	Committee Member of Technical Committee on Artificial Intelligence & Pattern Recognition of China Computer Federation (CCF-AI)	CCF
2016	James S. McDonnell Foundation (JSMF) Postdoctoral Fellowship Award in Studying Complex Systems	James S. McDonnell Foundation
2014	Pai Tao Yeh Fellowship	Purdue University
2013	Pai Tao Yeh Fellowship	Purdue University
2010	2nd Prize of Fifth National Competition of Transport Science and Technology	China
2010	Gammon Scholarship	Tsinghua University
2009	Zheng Ge Ru Scholarship	Tsinghua University
2008	Gammon Scholarship	Tsinghua University

## Publications

### CONFERENCE PROCEEDINGS

1. Xu, H., **Zhan, X.**, Yin, H., and Qin, H. Discriminator-Weighted Offline Imitation Learning from Suboptimal Demonstrations. Accepted in the *Thirty-ninth International Conference on Machine Learning (ICML22)*.
2. **Zhan, X.**, Zhu, X. and Xu, H. Model-Based Offline Planning with Trajectory Pruning. Accepted in *31st International Joint Conference on Artificial Intelligence and the 25th European Conference on Artificial Intelligence (IJCAI-ECAI 22)*.
3. **Zhan, X.**, Xu, H., Zhang, Y., Zhu, X. and Yin, H. DeepThermal: Combustion Optimization for Thermal Power Generating Units Using Offline Reinforcement Learning. In *Thirty-Sixth AAAI Conference on Artificial Intelligence (AAAI2022)*.
4. Xu, H., **Zhan, X.**, and Zhu, X. Constraints Penalized Q-Learning for Safe Offline Reinforcement Learning. In *Thirty-Sixth AAAI Conference on Artificial Intelligence (AAAI2022)*.
5. Qin, H., **Zhan, X.**, Li, Y., Yang, X. and Zheng, Y. Network-Wide Traffic States Imputation Using Self-interested Coalitional Learning. In *Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD'21)*, August 14–18, 2021, Virtual Event, Singapore. <https://doi.org/10.1145/3447548.3467424>.
6. Qin, H., Ke, S., Yang, X., Xu, H., **Zhan, X.**, and Zheng, Y. Robust Spatio-Temporal Purchase Prediction via Deep Meta Learning. In *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI2021)* 35 (5), 4312-4319.
7. Yang, C., Zhang, Y., **Zhan, X.**, Ukkusuri, S. V., and Qiu, W. Activity Chain Inference Using Travel Survey and Mobile Phone data. In *Proceedings of Transportation Research Board Meeting*, Washington D.C., January 2017.
8. Zischg, J., Klinkhamer, C., **Zhan, X.**, Krueger, E., Ukkusuri, S., Rao, P. S. C., Rauch, W. and Sitzenfrie, R. Evolution of Complex Network Topologies in Urban Water Infrastructure. In *World Environmental and Water Resources Congress 2017*, Sacramento, May 2017.
9. **Zhan, X.**, Ukkusuri, S. V. A Probabilistic Urban Link Travel Time Estimation Model Using Large-scale Taxi Trip Data. In *Proceedings of 94th Transportation Research Board Meeting*, Washington D.C., January 2015.
10. **Zhan, X.**, Qian, X., Ukkusuri, S. V. Measuring the Efficiency of Urban Taxi Service System. In *Proceedings of the 3rd ACM SIGKDD International Workshop on Urban Computing*, New York, August 2014.
11. Qian, X., **Zhan, X.**, Ukkusuri, S. Characterizing Urban Dynamics Using Large Scale Taxicab Data. In *Proceedings of 93rd Transportation Research Board Meeting*, Washington D.C., January 2014.
12. **Zhan, X.**, Ukkusuri, S. V.. Multi-User Class, Simultaneous Route and Departure Time Choice Dynamic Traffic Assignment with an Embedded Spatial Queuing Model. *5th International Symposium on Dynamic Traffic Assignment*.

Salerno, Italy, June, 2014.

13. Hasan, S., **Zhan, X.**, and Ukkusuri, S. V. Understanding Urban Human Activity and Mobility Patterns Using Large-scale Location-based Data from Online Social Media. *Proceedings of the 2nd ACM SIGKDD International Workshop on Urban Computing*, 2013.

## JOURNAL PUBLICATIONS

1. Qin, H., **Zhan, X.**, and Zheng, Y. CSCAD: Correlation Structure-based Collective Anomaly Detection in Complex System. Accepted in *IEEE Transactions on Knowledge and Data Engineering (TKDE)*.
2. **Zhan, X.**, Li, R., and Ukkusuri, S. V., 2020. Link-based Traffic State Estimation and Prediction for Arterial Networks Using License-plate Recognition Data. *Transportation Research Part C: Emerging Technologies*, 117, 102660.
3. Yang, C., Zhang, Y., **Zhan, X.**, Ukkusuri, S. V. and Chen, Y., 2020. Fusing Mobile Phone and Travel Survey Data to Model Urban Activity Dynamics. Accepted in *Journal of Advanced Transportation*.
4. **Zhan, X.**, and Ukkusuri, S. V., 2019. Spatial Dependency of Urban Sprawl and the Underlying Road Network Structure. *Journal of Urban Planning and Development*, 145(4), 04019014.
5. Zischg, J., Klinkhamer, C., **Zhan, X.**, Rao, S. C., and Sitzenfrei, R., 2019. A Century of Topological Co-Evolution of Complex Infrastructure Networks in an Alpine City. *Complexity*, 2019, 2096749.
6. Gehlot, H., **Zhan, X.**, Qian, X., Thompson, C., Kulkarni, M. and Ukkusuri, S. V., 2018. A-Rescue 2.0: A High Fidelity, Parallel, Agent-based Evacuation Simulator. *Journal of Computing in Civil Engineering*, 33(2), 04018059.
7. **Zhan, X.**, Ukkusuri, S. V., and Rao, S. C., 2017. Dynamics of Functional Failures and Recovery in Complex Road Networks. *Physical Review E*, 96(5), 052301.
8. **Zhan, X.**, and Ukkusuri, S. V., 2017. Multiclass, Simultaneous Route and Departure Time Choice Dynamic Traffic Assignment with an Embedded Spatial Queuing Model. *Transportmetrica B: Transport Dynamics*, doi: 10.1080/21680566.2017.1354738.
9. Mo, B., Li, R., **Zhan, X.**, 2017. Speed Profile Estimation Using License Plate Recognition Data. *Transportation Research Part C: Emerging Technology*, 82, 358–378.
10. Kreuger, E., Klinkhamer, C., Urich C., **Zhan, X.**, and Rao, S. C., 2017. Generic Patterns in the Evolution of Urban Water Networks: Evidence from a Large Asian City. *Physical Review E*, 95(3), 032312.
11. Li, R. Ye, Z., Li. B. and **Zhan, X.**, 2017. Simulation of Hard Shoulder Running Combined with Queue Warning During Traffic Accident with CTM model. *IET Intelligent Transport Systems*, 11(9), 553-560.
12. **Zhan, X.**, Zheng, Y., Yi, X., and Ukkusuri, S. V., 2016. Citywide Traffic Volume Estimation Using Trajectory Data. *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 29(2), 272-285.
13. **Zhan, X.**, Qian, X., Ukkusuri, S. V., 2016. A Graph Based Approach to Measure the Efficiency of Urban Taxi Service System. *IEEE Transactions on Intelligent Transportation Systems*, 17(9), 2479-2489.
14. **Zhan, X.**, Ukkusuri, S. V., Yang, C., 2016. A Bayesian Mixture Model for Short-term Average Link Travel Time Estimation Using Large-scale Limited Information Trip-based Data. *Automation in Construction*, 72(3), 237-246.
15. Mesa-Arango, R., **Zhan, X.**, Ukkusuri, S. V., Mitra, A., 2016. Direct Transportation Economic Impacts of Highway Networks Disruptions Using Public Data from United States. *Journal of Transportation Safety & Security*, 8(1), 36-55.
16. Hasan, S., Ukkusuri, S., **Zhan, X.**, 2016. Understanding Social Influence in Activity-Location Choice and Life-Style Patterns Using Geo-location Data from Social Media. *Frontiers in ICT*, 3:10, doi: 10.3389/fict.2016.00010.
17. Aziz, H. M., Ukkusuri, S., **Zhan, X.**, 2016. Determining the Impact of Personal Mobility Carbon Allowance Schemes in Transportation Networks. *Network and Spatial Economics*, 17(2), 505-545.
18. Ukkusuri, S., Hasan, S., Doan, K., Luong, B., **Zhan, X.**, Murray-Tuite, P., Yin, W., 2016. A-RESCUE: An Agent-based Regional Evacuation Simulator Coupled with User Enriched Behavior. *Network and Spatial Economics*, 17(1), 197-223.
19. **Zhan, X.**, Aziz, H. M., Ukkusuri, S. V., 2015. An Efficient Parallel Sampling Technique for Multivariate Poisson-Lognormal Model: Analysis with Two Crash Count Datasets. *Analytic Methods in Accident Research*, 8, 45-60.
20. **Zhan, X.**, Li, R., Ukkusuri, S. V., 2015. Lane-based Real Time Queue Length Estimation Using License Plate Recognition Data. *Transportation Research Part C: Emerging Technology*, 57, 85-102.
21. **Zhan, X.**, Ukkusuri, S. V., Zhu, F., 2014. Inferring Urban Land Use Using Large-Scale Social Media Check-in Data. *Network and Spatial Economics*, 14, 647-667.
22. **Zhan, X.**, Hasan, S., Ukkusuri, S. V., Kamga, C., 2013. Urban Link Travel Time Estimation Using Large-scale Taxi Data with Partial Information. *Transportation Research Part C: Emerging Technologies*, 33, 37-49.

23. Ukkusuri, S., **Zhan, X.**, Sadri A., Ye, Q., 2013. Exploring Crisis Informatics Using Social Media Data: A Study on 2013 Oklahoma Tornado. *Transportation Research Record*, 2459, 110-118.

## PEER REVIEWED BOOK CHAPTER

1. Qian, X, **Zhan, X.**, Ukkusuri, S. V. Characterizing Urban Dynamics Using Large Scale Taxicab Data. Engineering and Applied Sciences Optimization: Vol. 38, 17-32, Springer International Publishing, 2015.
2. Ukkusuri, S. V., Hasan, S., and **Zhan, X.** Checking the Urban Pulse: Social Media Data Analytics for Transportation Applications. Best Practices for Transportation Agency Use of Social Media Data. Taylor and Francis/CRC Press, 2013.

## THESES

1. Novel Approaches to Model Congestion Evolution and Dependencies in Complex Road Networks. Ph.D. Dissertation, Purdue University, 2017.
2. Understanding the Aggregate Level Urban Activity Patterns Using Large-Scale Geo-Location Data. MS Thesis, Purdue University, 2012.
3. A Cellular Automaton Based Microscopic Traffic Flow Simulation Model for Abnormal Traffic Flow. Undergraduate Thesis, Tsinghua University, 2011.

## PAPERS UNDER REVIEW

1. Li, J., **Zhan, X.**, Xu, H., Zhu, X., Liu, J., and Zhang, Y. Distance-Sensitive Offline Reinforcement Learning. Submitted to *Thirty-Sixth Annual Conference on Neural Information Processing Systems (NeurIPS 2022)*.
2. Niu, H., Sharma, S., Qiu, Y., Li, M., Zhou, G., Hu, J. and **Zhan, X.** When to Trust Your Simulator: Dynamics-Aware Hybrid Offline-and-Online Reinforcement Learning. Submitted to *Thirty-Sixth Annual Conference on Neural Information Processing Systems (NeurIPS 2022)*.
3. Xu, H., Li, J., Li, J. and **Zhan, X.** A Policy-Guided Imitation Approach for Offline Reinforcement Learning. Submitted to *Thirty-Sixth Annual Conference on Neural Information Processing Systems (NeurIPS 2022)*.
4. Qin, H., **Zhan, X.**, Li, Y., Xu, H., and Zheng, Y. Enhancing semi-supervised learning via self-interested coalitional learning. Submitted to *Thirty-Sixth Annual Conference on Neural Information Processing Systems (NeurIPS 2022)*.
5. Wang, G., Niu, H., Zhu, D., Hu, J., **Zhan, X.**, and Zhou, G. A Versatile and Efficient Reinforcement Learning Framework for Autonomous Driving. Submitted to *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2022)*.
6. Jiang, L., Wang, X., Yang, A., Wang, X., Ye, X., Ouyang, Y., and **Zhan, X.** An Efficient Multi-Agent Optimization Approach for Coordinated Massive MIMO Beamforming. Submitted to *IEEE Global Communications Conference (GLOBECOM 2022)*.

## Talks & Presentations

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1. Data-Driven Decision Making for Real-World Scenarios. Invited talk at *Haomo AI Day*. April 2022, Beijing China.
2. DeepThermal: Combustion Optimization for Thermal Power Generating Units Using Offline Reinforcement Learning. *Thirty-Sixth AAAI Conference on Artificial Intelligence (AAAI2022)*. February 2022
3. Discriminator-Weighted Offline Imitation Learning from Suboptimal Demonstrations. *NeurIPS 2021 Deep RL Workshop*. December 2021.
4. Podcast interview at "TalkRL: The Reinforcement Learning Podcast" with Robin Chauhan. August 30, 2021.
5. Offline RL and Its Potential Applications in Healthcare Decision Making. Guest lecture at DeeCamp 2021. June 2021, online.
6. Network-Wide Traffic State Inference Using Emerging Urban Data Sources. Guest lecture at University of Central Florida. March 2021, online.
7. Application of Deep Reinforcement Learning in Control Optimization of Thermal Power Plants. *IEEE Services - Industry Symposium*. October 2020.
8. Urban Computing: Building Intelligent Cities with Big Data and AI. Invited talk at Tsinghua University. November 2019, Beijing, China.
9. Data-driven Methods in Urban Applications: New Problems, New Directions and New Approaches. Invited talk at Tsinghua University. December 2018, Beijing, China.

10. Spatio-Temporal Deep Learning in Intelligent Cities. *Smart Cities and Urban Computing Forum, China National Computer Congress (CNCC 2018)*. October 2018, Hangzhou.
11. Data-driven Optimization Models for Logistics in Urban Applications. *3rd Workshop on Applications of the Mathematical Modeling in Enterprises*. July 2018, University of Chinese Academy of Sciences, Beijing.
12. Data-driven Methods in Urban Transportation Applications. Invited talk at Tsinghua University. September 2017, Beijing, China.
13. A Vertex Split-Recovery Model for Congestion Evolution Process on Road Networks. *INFORMS 2016*. November 2016, Nashville.
14. Traffic State Estimation for Arterial Networks Using License-plate Recognition Data. *INFORMS 2016*. November 2016, Nashville.
15. A Node Split-Recovery Model for Congestion Evolution Process on Road Networks. *Resilience Week 2016*. August 2016, Chicago.
16. A Node Splitting-Recovery Model for Congestion Evolution Process on Road Networks. *4th International Symposium on Water, Feedbacks, and Complexity*. March 2016, Purdue University.
17. A Bayesian Mixture Model for Short-term Average Link Travel Time Estimation Using Large-scale Limited Information Trip-based Data. *INFORMS 2015*, November 2015, Philadelphia.
18. A Graph-based Approach to Measure the Efficiency of Urban Taxi Service System. *INFORMS 2015*, November 2015, Philadelphia.
19. Measuring the Efficiency of Urban Taxi Service System. *KDD 2014 International Workshop on Urban Computing*, August 2014, New York.
20. Urban Link Travel Time Estimation Using Large-scale Taxi Data with Partial Information. *MPE 2013+ Workshop on Sustainable Human Environments*. April 2014, Rutgers University.
21. Multiclass Dynamic User Equilibrium with a Path Based Cell Transmission Model for General Traffic Networks. *INFORMS 2013*, October 2013, Minneapolis.
22. Real Time Link Travel Time Estimation Using License-plate Recognition Data. *INFORMS 2013*, October 2013, Minneapolis.

## Research Projects

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### Data-Driven Decision Making Under Complex Autonomous Driving Scenarios.

2022-Present

FUNDED BY HAOMO.AI

Research project manager for developing data-driven decision-making models under complex autonomous driving scenarios.

### 5G Massive MIMO Wireless Network Optimization.

2021-Present

FUNDED BY ASIAINFO

Technical lead for developing optimization algorithms to optimize 5G Massive MIMO Beamforming configurations. The developed optimization algorithms have been successfully deployed on 5,000 5G base stations in Tianjin by AsiaInfo. One research paper is submitted to IEEE GLOBECOM 2022.

### Artificial Intelligence-based Optimization System for Thermal Power Generating Units.

2018-2020

FUNDED BY CNH ENERGY AND JD INTELLIGENT CITY RESEARCH

Research project manager for developing a deep reinforcement learning model and system to optimize power generation efficiency for thermal power generating units in power plants. Two research papers are published in *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI2022)*. This research has already finished software productization in JD Technology and been deployed in **6** power plants and **9** TPGUs in China.

## Collective Anomaly Detection for Large-Scale Complex Sensory Systems.

2018

JD INTELLIGENT CITY RESEARCH

Research project manager for developing a collective anomaly detection algorithm for very high dimensional sensory data in complex systems. Corresponding research paper is published in IEEE Transactions on Knowledge and Data Engineering (TKDE).

## Bridging Information, Uncertainty and Decision-Making in Hurricanes Using an Interdisciplinary Perspective

2015 - 2017

FUNDED BY NATIONAL SCIENCE FOUNDATION (NSF)

Project leader for developing parallelized large-scale agent-based traffic simulator for hurricane evacuation in urban road networks. Corresponding research paper is published in Journal of Computing in Civil Engineering.

## Incorporating Household Decision Making with Dynamic Transportation Modeling in Hurricane Evacuation

2012 - 2015

FUNDED BY NATIONAL SCIENCE FOUNDATION (NSF)

Participated in coding a Java-based large-scale agent-based traffic simulator for hurricane evacuation (A-RESCUE). Corresponding research paper is published in Network and Spatial Economics.

## The Use of Large Scale Datasets for Understand Traffic Network State

2012 - 2013

SPONSOR: UNIVERSITY TRANSPORTATION RESEARCH CENTER - REGION 2

Developed a real-time link travel time estimation model using large-scale taxi trip data from New York City. Corresponding research paper is published in Transportation Research Part C.

## Collaborative Research Activities

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### Traffic Signal Optimization: A Data-driven and Deep Reinforcement Learning Approach

2017 - 2018

COLLABORATED WITH DIDI CHUXING

1 patent granted.

### Citywide Traffic Volume Estimation Using Large-scale Trajectory Data

2015 - 2016

COLLABORATED WITH MICROSOFT RESEARCH ASIA (MSRA)

Corresponding research paper is published in IEEE Transactions on Knowledge and Data Engineering (TKDE).

### Real Time Queue Length Estimation Using License-plate Recognition Data

2014 - 2015

COLLABORATED WITH TSINGHUA UNIVERSITY, CHINA

Corresponding research paper is published in Transportation Research Part C.

### The Use of Large-scale Dataset for Understanding Network State

2013

COLLABORATED WITH THE CITY UNIVERSITY OF NEW YORK (CUNY)

Corresponding research paper is published in Transportation Research Part C.

## Academic Activities

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### MEMBER OF EDITORIAL BOARD

- Journal of Big Data Analytics in Transportation: *Editorial Board Member*
- Frontiers in Built Environment - Transportation and Transit Systems: *Review Editor*

### REVIEWER OF JOURNALS

- ACM Transactions on Intelligent Systems and Technology
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- IEEE Transactions on Big Data (TBD)
- IEEE Transactions on Knowledge Discovery from Data (TKDD)
- IEEE Transactions on Intelligent Transportation Systems (ITS)

- IEEE Transactions on Systems, Man and Cybernetics: Systems (SMC)
- IEEE Transactions on Mobile Computing (TMC)
- IEEE Signal Processing Letters
- IEEE Access
- PLOS ONE
- Transportation Research Part A: Policy and Practice
- Transportation Research Part B: Methodological
- Transportation Research Part C: Emerging Technologies
- Transportation Research Part D: Transport and Environment
- Transportmetrica B: Transport Dynamics
- European Journal of Operational Research
- Network and Spatial Economics
- Transportation
- Journal of Advanced Transportation
- Expert Systems With Applications
- Environment and Planning B: Urban Analytics and City Science
- IET Intelligent Transport Systems
- Journal of Physics: Complexity

## REVIEWER OF CONFERENCES

- Conference on Neural Information Processing Systems (NeurIPS): NeurIPS2022
- International Conference on Machine Learning (ICML): ICML2022
- IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS): IROS2022
- AAAI Conference on Artificial Intelligence: AAAI2021
- China Conference on Data Mining (CCDM): CCDM2021,2022
- IEEE International Conference on Intelligent Transportation (ITSC)
- IEEE Conference on Decision and Control
- Transportation Research Board Annual Meeting

## CONFERENCE PROGRAM COMMITTEE

- China Conference on Data Mining (CCDM): CCDM2022

## CHAIR OF CONFERENCE SESSIONS

- **Session Chair:** Innovative Data Sources in Transportation. *INFORMS 2015*, November, Philadelphia.
- **Session Chair:** Advances in Transportation Network Modeling. *INFORMS 2015*, November, Philadelphia.

# Teaching Experience

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## Course Lecturer at Tsinghua University

TSINGHUA UNIVERSITY

- **Future Automobiles (Global Open Course)** (Fall 2021): Data-driven Methods for Intelligent Urban Transportation Systems

## Courses as Teaching Assistant at Purdue University

LYLES SCHOOL OF CIVIL ENGINEERING, PURDUE UNIVERSITY

- **CE 597** (Fall 2015): The Science and Business of Logistics Systems
- **CE 398** (Spring 2013): Introduction to Civil Engineering System Design

## Co-Instructor of a Summer Course

Jun 2016

SCHOOL OF TRANSPORTATION ENGINEERING, TONGJI UNIVERSITY, CHINA

- **Summer Course:** Big Data Transportation Analytics

## Instructor at Workshop

Jun. - Jul. 2015

KOREA UNIVERSITY, SEOUL, SOUTH KOREA

Synthesis Workshop on “Dynamics of Structure and Functions of Complex Networks”

## Students and Supervised Interns

2021 - Present

INSTITUTE FOR AI INDUSTRY RESEARCH (AIR), TSINGHUA UNIVERSITY

- Jianxiong Li (2021-present), PhD student at Tsinghua University, China
- Wenjia Zhang (2021-present), PhD student at Tsinghua University, China
- Peng Cheng (2021-present), PhD student at Beijing Jiaotong University, China
- Jiang Li (2021-present), Master student at Tsinghua University
- Haoyi Niu (2021-present), Undergraduate student at Tsinghua University, China
- Weiye Xi (2021-present), Undergraduate student at Tsinghua University, China
- Yong Wang (2021), PhD student at Beijing Institute of Technology, China

## Supervised Interns

2018 - 2021

JD INTELLIGENT CITY RESEARCH

- Yixian Li (2018), Master student at Northeastern University, China
- Huilin Qin (2018-2020), PhD student at Xidian University, China
- Haoran Xu (2018-2020), Master student at Xidian University, China

## Supervised Interns

2017

MICROSOFT RESEARCH ASIA

- Huilin Qin (2017-2018), PhD student at Xidian University, China

## Supervised Exchange Undergraduate Students at Purdue

2015

LYLES SCHOOL OF CIVIL ENGINEERING, PURDUE UNIVERSITY

- Jingxing Wang (Jan. - Feb. 2015), from Tsinghua University, China
- Xiaodong Qian (Jun. - Sep. 2015), from Tsinghua University, China
- Victorial Mutran (Jul. - Aug. 2015), from Universidade do Estado do Pará, Brazil

## Membership & Affiliations

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### Committee Member

2018 - Present

Technical Committee on Artificial Intelligence & Pattern Recognition of China Computer Federation (CCF-AI)

### Committee Member

2021 - Present

Executive Committee on Intelligent Vehicles of China Computer Federation (CCF)

### Member

2020 - Present

Institute of Electrical and Electronics Engineers (IEEE)

### Member

2018 - Present

China Computer Federation (CCF)

### Member

2013 - 2017

INFORMS Chapter at Purdue University

### Co-chair

2012 - 2014

Tsinghua University Alumni Association of Purdue University