JIAWEI WANG

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EDUCATION

McGill University, Montreal, Canada *Sep. 2019-present*
Ph.D. student in Civil Engineering (Transportation)

- Supervisor: Prof Lijun Sun
- GPA : **4.0**/4.0
- Research interest: Traffic control; Reinforcement learning; Machine learning
- Honors/Awards: McGill Engineering International Tuition Awards(MEITA); CIRRELT 2020-2021 Doctoral research excellence scholarship

Sun Yat-sen University, Guangdong, China *Sep. 2016 - Jun. 2019*
M.S. in Transportation Information Engineering and Control

- Supervisor: Prof Zhaocheng He
- GPA : 3.8/5.0 **(Top 20%)**
- Thesis: "Urban network traffic prediction based on Bi-LSTM neural network"
- Honors/Awards: First Level Graduate Scholarship of SYSU (2016); Second Level Graduate Scholarship of SYSU (2017)

Sun Yat-sen University, Guangdong, China *Sep. 2012 - Jun. 2016*
B.Eng. in Traffic Engineering

- GPA : 3.8/5.0 **(Top 10%)**
- Thesis: "Comprehensive Analysis of Mesoscopic Traffic Simulator"
- Honors/Awards: Second Level Undergraduate Scholarship of SYSU (2012, 2013); Third Level Undergraduate Scholarship of SYSU (2014)

EXPERIENCE

Shenzhen Peng Cheng Laboratory Aug 2018 - Jun 2019
Researcher *Shenzhen, China*

· Project: Intelligent Transportation Analysis Engine and Application

- Traffic data process and analysis
- Traffic prediction model design and implementation
- Traffic prediction platform development

Guangdong Key Laboratory of Intelligent Transportation Systems Jul 2016 - Sep 2017
Researcher *Guangzhou, China*

· Project: Online Traffic Simulation for Guangzhou Inner Ring Road

- Traffic data collection and analysis
- Simulation network transformation
- OD estimation module development

INTERNATIONAL PEER-REVIEWED JOURNALS

[1] **Jiawei Wang**, Lijun Sun*, *Dynamic holding control to avoid bus bunching: A multi-agent deep reinforcement learning framework*, Transportation Research Part C: Emerging Technologies, 2020, 116: 102661.

[2] **Jiawei Wang**, R Chen, Z He*, *Traffic speed prediction for urban transportation network: A path based deep learning approach*, Transportation Research Part C: Emerging Technologies, 2019, 100: 372-385.

[3] X Chen, Z He*, Y Chen, Y Lu, **Jiawei Wang**, *Missing traffic data imputation and pattern discovery with a Bayesian augmented tensor factorization model*, Transportation Research Part C: Emerging Technologies, 2019, 104: 66-77.

[4] X Chen, Z He*, **Jiawei Wang**, *Spatial-temporal traffic speed patterns discovery and incomplete data recovery via SVD-combined tensor decomposition*, Transportation research part C: Emerging technologies, 2018, 86: 59-77.

CONFERENCE PROCEEDINGS

[1] **Jiawei Wang**, Lijun Sun*, *Reducing bus bunching with asynchronous multi-agent reinforcement learning*, IJCAI-21 (the 30th International Joint Conference on Artificial Intelligence), 2021. **Acceptance rate: 13.9%**

[2] Tianyu Shi, **Jiawei Wang (Equal Contribution)**, Yuankai Wu, Luis Miranda-Moreno, Lijun Sun*, *Efficient connected and automated driving system with multi-agent graph reinforcement learning*, Transportation Research Board (TRB), Washington, USA, 2021.

[3] **Jiawei Wang**, Tianyu Shi, Yuankai Wu, Luis Miranda-Moreno, Lijun Sun*, *Multi-agent graph reinforcement learning for connected automated driving*, ICML 2020 Workshop on AI for Autonomous Driving (AIAD).

[4] **Jiawei Wang**, Lijun Sun*, *Dynamic holding control to avoid bus bunching: A multi-agent deep reinforcement learning framework*, TransitData 2020, Toronto (online), 2020.