

## Qida SU, Ph.D.

School of Civil and Environmental Engineering  
 Nanyang Technological University  
 50 Nanyang Avenue, Singapore 639798  
 Mobile: (65) 89418262  
 Homepage: [qidasu.github.io](https://qidasu.github.io)  
 Email: [qida.su@ntu.edu.sg](mailto:qida.su@ntu.edu.sg) [qsu002@ntu.edu.sg](mailto:qsu002@ntu.edu.sg)

### EDUCATION

- 2014- 2019      *Nanyang Technological University*, Singapore
- **Ph.D.** in Transportation, CGPA: 4.9/5.00
  - Thesis title: **Managing commute traffic: from parking provision with ride-sourcing to work hours arrangements considering household travels**, supervised by Prof. David Z.W. Wang.
  - Academic training from operation research and economics
  - Courses also taken from *Technical University of Munich Asia (TUM Asia)*
- 2010- 2014      *Hong Kong University of Science and Technology*, Hong Kong, China
- **B.Eng. (First Class Honors)** in Civil and Environmental Engineering
  - Academic exchange to the *University of Toronto*, Canada 2013
  - Taking undergraduate and postgraduate level courses covering subjects such as economics, environmental engineering, psychology

### WORK EXPERIENCE

- 2020-Present      *Research Fellow*, NTU, Singapore
- Reviewed journal papers and wrote research proposals for grants.
  - Working in projects supported by Ministry of Education (MOE) Singapore
    - Dynamic Traffic Management with Day-to-day Travel Behaviour Model
    - Public Transportation Services with Autonomous Vehicles
- 2018- 2019      *Project Officer*, NTU, Singapore
- 2017- 2018      *Teaching Assistant*, NTU, Singapore
- 2013              *Summer Trainee*, AECOM (Asia), Hong Kong
- Prepared EIA reports for Macau International Airport wastewater treatment plant upgrade.

### RESEARCH INTEREST

Transportation economics; Emerging transport policy and management; Integrated land use and transport planning; Transportation system modeling and optimization; Autonomous vehicles.

### JOURNAL PUBLICATIONS

- Su, Q., & Wang, D. Z. W. (2020). **On the morning commute problem with distant parking options in the era of autonomous vehicles**. *Transportation Research Part C: Emerging Technologies*. (SCI, IF=6.077, JCR: Q1, Rank: 4/36) <https://doi.org/10.1016/j.trc.2020.102799>
- Su, Q., & Wang, D. Z. W. (2020). **On the commute travel pattern with compressed work schedule**. *Transportation Research Part A: Policy and Practice* 136: 334-356. (SSCI, SCI, IF=3.992, JCR: Q1, Rank: 1/10)

7/37) <https://doi.org/10.1016/j.tra.2020.04.014>

Su, Q., & Wang, D. Z. W. (2019). **Morning commute problem with supply management considering parking and ride-sourcing.** Transportation Research Part C: Emerging Technologies. <https://doi.org/10.1016/j.trc.2018.12.015>.

## **WORKING PAPERS**

Su, Q. **Spatial parking planning design with mixed conventional and autonomous vehicles.** *Submitted to* Transportation Research Part B: Methodological (SSCI, SCI, IF=4.796, JCR: Q1, Rank: 3/37)

Su, Q., & Wang, D. Z. W. **On the public-private partnership projects of automated roadway.**

Su, Q. **Modeling and managing heterogeneous travel and work schedule choice considering telecommuting.**

Su, Q., & Wang, D. Z. W. **Bottleneck congestion and work starting time distribution considering household travels.** <https://arxiv.org/abs/2104.00938>

Su, Q. **Optimal parking provision in multi-modal morning commute problem considering ride-sourcing service.** <https://arxiv.org/abs/2104.01761>

## **CONFERENCE PROCEEDINGS**

Su, Q. & Wang, D. Z. W. (2021) **On the build-operate-transfer projects of automated roadways.** Accepted by International Symposium on Transportation Data and Modelling 2021.

Su, Q. & Wang, D. Z. W. (2021) **An equilibrium analysis of travel and work schedule choice in the post-pandemic new normal with telecommuting.** Accepted by Transportation Research Board 100th Annual Meeting.

Su, Q., & Wang, D. Z. W. (2019). **Bottleneck congestion and work starting time distribution considering household travels.** Presented at Transportation Research Board 98th Annual Meeting, Washington DC, United States. <https://trid.trb.org/view/1573283>.

Su, Q., & Wang, D. Z. W. (2018). **Compressed work schedule in travel demand management and its daily commute pattern.** Oral presented at the Transportation Research Board 97th Annual Meeting, Washington DC, United States. <https://trid.trb.org/view/1495738>.

Su, Q., & Wang, D. Z. W. (2018). **On the compressed work schedule in travel demand management.** Oral presented at the 6th International Symposium on Reliability Engineering and Risk Management (6ISRERM). [http://rpsonline.com.sg/proceedings/9789811127267/978-981-11-2726-7\\_CMTA15.xml](http://rpsonline.com.sg/proceedings/9789811127267/978-981-11-2726-7_CMTA15.xml)

## **INVITED SEMINAR**

Jan 2021                      Zhejiang University, China

Title: Improving urban mobility with strategic planning and management of supporting infrastructure for autonomous vehicles

## **RESEARCH & PROJECT EXPERIENCE**

2014-2019                      *Research during Ph.D.*, NTU, Singapore

- Modelled commuters' travel behavior and dynamic equilibrium in peak hours.
- Explored management schemes of parking supply considering ride-sourcing.

- Examined flexible work arrangements to alleviate peak hour congestion.
  - Conducted economic analysis on both analytical and numerical results.
- Sept 2016      ***The Mobility Summer School***, IDEA League, RWTH Aachen, Germany
- Theme: Safe, Environmental and Economic Transport - Meeting future transportation challenges
  - A one-week training program with 30 postgraduate students from around the world
  - Learned leading technology and framework of autonomous driving.
  - Presented a roadmap of self-driving for lightweight vehicles in a group.
- Fall 2013      ***Urban Transportation Networks Analysis Course Project***, HKUST, Hong Kong
- Advisor: Chair Prof. Hai Yang
  - A one-semester postgraduate level course (7 students in total), grade A range
  - Conducted a traffic impact study in the Sioux Falls Network, applying convex combination method in transportation network analysis
- 2011-2012      ***Undergraduate Research Opportunity Program***, HKUST, Hong Kong
- Topic: Innovative iron-based process for odour control in stormwater drain in tidal areas

### **TEACHING EXPERIENCE**

- 2017-2018      **Teaching Assistant**, NTU, Singapore. Lectured tutorials and labs in two civil engineering courses and supervised final year undergraduate students in their final year projects.

### **HONORS & AWARDS**

- 2014-2018      **NTU Research Scholarship** (Ph.D. scholarship), NTU, Singapore
- September 2016      **Representative of ASPIRE League** to attend The Mobility Summer School of IDEA League, RWTH Aachen, Germany
- 2016      **Certificate of completion of University Teaching Courses** (awarded to students who are well prepared to teach), NTU, Singapore
- 2012-2014      **Scholarship Scheme for Continuing Undergraduate Students**, HKUST, Hong Kong
- 2012-2014      **Lau Fu Wing Award (2013,2014)** (awarded to outstanding students in civil and environmental department), HKUST, Hong Kong
- 2011-2013      **Dean's List** (awarded to students with SGA>3.7 out of 4), HKUST, Hong Kong
- 2010-2014      **China Soong Ching Ling Foundation “Zhi Yuan” Scholarship** (awarded to 10-15 outstanding students per year), Guangdong, China
- September 2010      **Civil and Environmental Engineering Department Scholarship**, HKUST, Hong Kong
- June 2010      **Outstanding Graduate**, The Affiliated High School of South China Normal University, Guangzhou, China

### **PROFESSIONAL SERVICE**

#### *Member of Professional Organization*

- Transportation Research Board

#### *Reviewer for Academic Journals and Peer-reviewed Conference*

- Journal of Transportation Engineering, Part A: Systems
- Transportation Research Board Annual Meeting

#### *Helper for Conferences*

- The 3rd international symposium on multimodal transportation (ISMT 2019), Singapore

**OUTREACH**

- 2016-2018      **Vice President**, CEE Graduate Student Council, NTU. Organized annual poster competitions. In charge of all internal affairs. Negotiated with different departments for annual funding.
- 2017            **Volunteer**, SAFRA Swim for Hope 2017, Singapore.
- 2014,2015      **Volunteer**, Standard Chartered Marathon Singapore
- Spring 2012    **Organization Committee Member**, Light On Dreams--Sichuan Service Trip, HKUST Connect. In charge of trip planning, team recruitment and logistics. Serviced more than 300 students in rural areas of China.
- 2011-2012      **General Secretary**, Chinese Folk Art Society 2011-2012, HKUST. In charge of logistic affairs.

**PERSONAL**

- IT skills: Python, Mathematica, Machine learning, C++, MATLAB, Excel VBA
- Languages: Chinese (Mandarin and Cantonese) (Native), English (Proficient)

*(Updated in April 2021)*