RONG ZHENG

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University Address: 999 Xi-An Road, Pidu District, Chengdu, Sichuan Province, China, 611756

EDUCATION BACKGROUND

Southwest Jiaotong University,

Chengdu, China

2020 - Present

M.S. in Transportation Planning and Management

GPA: 91.32 3.67/4.0; National Scholarship (Rank: 1/323)

Faculty mentors: Associate Professor Hongtai Yang

Thesis: "Optimization of autonomous modular demand responsive transit service design"

Southwest Jiaotong University,

Chengdu, China

2016 - 2020

B.S. in Transportation

GPA: 87.64 3.55/4.0; Outstanding Graduates

Faculty mentors: Associate Professor Hongtai Yang

Thesis: "Modeling and optimization of intercity demand responsive transit service design"

RESEARCH INTERESTS

- ◆ **Topics**: Mobility as a service · Demand responsive transit · Autonomous modular bus · Ridesharing · Micromobility
- **♦** Methodologies:

Continuous approximation method · Nonlinear programming · Integer programming · Statistical analysis · Data mining

PUBLICATIONS

♦ Papers Published

[1] H Yang, **R Zheng***, W Fan*, X Zhang, Z Zhang, "Optimization of Intercity Demand Response Transit Service Design Considering Zoning Strategy", *Transportation Research Board 100th Annual Meeting*, 2021. DOI: http://dx.doi.org/10.13140/RG.2.2.17376.61447

[2] J Huo, H Yang*, C Li, **R Zheng**, L Yang, Y Wen, "Influence of the Built Environment on E-scooter Sharing Ridership: A Tale of Five Cities", *Journal of Transport Geography*, 2021. DOI:

https://doi.org/10.1016/j.jtrangeo.2021.103084

- [3] H Yang, X Lu, X Zhou, **R Zheng**, Y Liu*, S Tao, "Expected Length of the Shortest Path of the Traveling Salesman Problem in 3D Space", *Journal of Advanced Transportation*, 2022. DOI: https://doi.org/10.1155/2022/4124950
- [4] L Jiang, H Yang*, **R Zheng**, J Huo, "The Difference between Customers and Subscribers in Boston Tourists Using Shared Bicycles under COVID-19: Trip Frequency and Its Determinants", 2021 6th International Conference on Transportation Information and Safety (ICTIS), 2021. DOI: https://doi.org/10.1109/ICTIS54573.2021.9798632
- [5] X Zhang, H Yang*, **R Zheng**, Z Jin, B Zhou, "A Dynamic Shared Bikes Rebalancing Method Based on Demand Prediction", 2019 IEEE Intelligent Transportation Systems Conference (ITSC), 2020. DOI: https://doi.org/10.1109/ITSC.2019.8917099

♦ Papers Submitted

- [6] H Yang, **R Zheng***, W Fan*, "A Hybrid Optimization Method for the Intercity Demand Responsive Transit Service Design", *Transportation Research Part A*, 2022 (Under Review)
- [7] **R Zheng**, H Yang*, L Jiang, J Huo, X Lu, "Optimizing the Cleaning and Disinfection Scheme for Dockless Shared Bikes", *Journal of Advanced Transportation*, 2022 (Under Review)
- [8] H Yang, **R Zheng**, X Li*, J Huo, L Yang, T Zhu, "Nonlinear and Threshold Effects of Built Environment on E-scooter Sharing Ridership", *Journal of Transport Geography*, 2022 (Under Review)
- [9] X Zhang, **R Zheng***, X Zhang, "Influence of Built Environment Factors on the Market Share of Bike and E-bike Service", *Transportation Research Board 102th Annual Meeting*, 2023 (Under Review)

PRENTATIONS AND POSTERS

♦ Conference Talk

• Intercity Demand Responsive Transit Service Design: A Hybrid Optimization Method. 9th International Conference

of Transportation and Space-time Economics Forum (TSTE 2021), Beijing, China (virtual), November, 2021.

♦ Conference Poster

• Optimization of Intercity Demand Response Transit Service Design Considering Zoning Strategy. *Transportation Research Board 100th Annual Meeting*, Washington, D.C. (virtual), January, 2021.

PROFESSIONAL EXPERIENCE

♦ Research

♦ Research Assistant at NUELIIT, Southwest Jiaotong University

2019 - 2020

Sponsored by NSFC (Natural Science Foundation of China)

with Associate Professor Hongtai Yang

Project: Demand Responsive Shuttle Transit Service Design Considering Cost and Benefit

♦ Research Assistant at NUELIIT, Southwest Jiaotong University

2017 - 2018

Sponsored by Sichuan SRTP (Student Research Training Program)

with Associate Professor Jun Zhao

Project: Optimization of Crew Scheduling for Urban Rail Transit Considering Equilibrium and Efficiency

♦ Teaching

Statistical Methods for Transportation Data Analysis

Teaching Assistant

Fall 2021

♦ Reviewer

IEEE Intelligent Transportation Systems Conference (ITSC)

2020 - 2022

2021

AWARDS AND FELLOWSHIPS

♦ Academic Scholarship

National Scholarship (Top 1%)	2021
First Price of University-level Scholarship (twice)	2020, 2021
Grand Price of National Express Scholarship	2020
Second Price of University-level Scholarship (three times)	2016, 2017, 2018

♦ Honorary Title

Pacemaker to Excellent Graduate Student	2021
Outstanding Graduate (Top 3%)	2020
Merit Student (twice)	2018, 2019
Ming Cheng Award	2017

♦ Contest Awards

Second Prize of China Data Statistics and Analysis Contest	2021
Second Prize of "Huashu Cup" China Mathematical Contest in Modeling	2020
Third Prize of China Urban Rail Transit Technology Innovation and Entrepreneurship Competition	2019
Second Prize of China Undergraduate Mathematical Contest in Modeling	2018
Second Prize of Electrician Mathematical Contest in Modeling (twice)	2017, 2018
Third Prize of May Day Mathematical Contest in Modeling	2018
Second Prize of May Day Mathematical Contest in Modeling	2017

Software Copyright

Jiexing Shared Bike Disinfection Staff Assignment System	2022
Sutong Intercity Demand Responsive Transit Planning and Analysis System	2022
Zhiheng Urban Rail Transit Crew Scheduling System	2019

TENCHNICAL SKILLS

♦ Computer Proficiency:

MATLAB (Mathematical programming); Python, R, C, C++ (Programming); Stata (Statistical modeling); ArcGIS (Visual programming interface); MSOffice; AutoCad; Powerbuilder.

Note: National Computer Rank Examination (MS Office: Level 2; C Programming Language: Level 2)

Third Prize of "Huawei Cup" China Post-Graduate Mathematical Contest in Modeling

♦ Language: CET-6 (500)