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: 1/358)

    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 C*, 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*

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**
Third Prize of "Huawei Cup" China Post-Graduate Mathematical Contest in Modeling	*2021*
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); MS Office; AutoCad; Powerbuilder.
  Note: National Computer Rank Examination (MS Office: Level 2; C Programming Language: Level 2)
- ◆ **Language:** CET-6 (500)