



## Education

### Ph.D candidate of System science

Ph.D's degree program

Beijing Jiaotong University

September 2019 – June 2024 (expected)

Thesis: Driver-passenger matching and vehicle repositioning optimization in the Ride-sourcing market

### Visiting student in Transportation Planning

Visiting Ph.D program

Hiroshima University

May 2022 – June 2023

Lab: Mobilities and Urban Policy

Co-supervisor: Junyi ZHANG

### Master of Transportation Planning and Management

Master's degree program

Beijing Jiaotong University

September 2018 – June 2019 (continued as Ph.D candidate)

Major: Transportation Planning and Management

### Bachelor of Traffic Engineering

Bachelor's degree program

Qingdao University of Technology

September 2014 – June 2018

Major: Traffic Engineering

Final grade: 5/69

## Accepted papers

### Reassignment Algorithm of the Ride-Sourcing Market Based on Reinforcement Learning

2023

First author

IEEE Transactions on Intelligent Transportation Systems

DOI: 10.1109/TITS.2023.3274636.

### Order dispatching optimization in ride-sourcing market by considering cross service modes

2023

First author

Journal of Central South University

DOI: 10.1007/s11771-022-5193-4.

## Under review papers

### Reinforcement learning-based order-dispatching optimization in ride-sourcing service

2023

First author

Computers and Industrial Engineering

State: Second round review.

### Promoting collaborative dispatching in the ride-sourcing market with a third-party integrator

2023

First author

Transportation Research Part A

State: First round review.

## Research project

### Management optimization and intelligent service of car-sharing travel under big data environment

2020

Key student participants

National Natural Science Foundation of China

- Coordinate the development of the data analysis platform, coordinate the design requirements of functional modules, and coordinate the formulation of data interface specifications.
- Design platform UI and back-end API, write front-end visualization and back-end algorithm and analysis code, write development documents

### Future Urban Transportation Management

2023

Key student participants

National Natural Science Foundation of China

- Write a deduction and simulation platform for online travel system under emergency and road control

### Research on matching algorithm of ride-sourcing considering individual heterogeneity

2021

Principal Investigator

Beijing Jiaotong University Student Fund

- Formulate the simulation technology route of combining reinforcement learning and individual behavior model

## Personal projects

### Sharing Mobility Analysis, Regulation and Track (SMART) platform

2022

*Simulation and Track Platform*

*Developer*

A platform that integrates ride-sourcing, shared car and shared bicycle order data, trajectory data analysis, mining and visualization, travel demand forecasting, etc.

### RideSourcingEmergency

2023

*Simulation and Track Platform*

*Developer*

Deduction and simulation platform for ride-sourcing system under emergencies and road control.

### RideSourcingGym

2320

*Simulation, Training and Test Environment*

*Developer*

A simulation environment for the ride-sourcing system that supports reinforcement learning-based dispatching algorithms, reposition algorithms, and space-time pricing algorithms.

## Technical skills

<b>Deep Learning</b>	Pytorch, Gym, Stable-baselines3
<b>Data Science</b>	Pandas, Numpy, Scipy, Scikit-learn, Spark
<b>Operations Research</b>	cplex DOpplex
<b>Visualization</b>	Matplotlib, Echarts, seaborn, leaflet, Mapboxgl
<b>Web Development</b>	Django, JavaScript, React, Django REST Framework, Axios, Antdesign

## Awards

<b>National Second Prize</b>	the Second Digital China Innovation Competition	2022
<b>National Third Prize</b>	Mathematical Contest in Modeling for Chinese Graduate Students	2019
<b>First Prize</b>	Beijing Jiaotong University Doctoral Scholarship	2019,2020, 2021

## Work experiences

### Traffic Information Center

*Beijing Transportation Commission*

*Assistant engineer*

*2019.03-2019.06*

Formulate the "Specifications for Labeling Text Information of Transportation Video Images"