



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

2023

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

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

Awards

National Second Prize	the Second Digital China Innovation Competition	2022
National Third Prize	Mathematical Contest in Modeling for Chinese Graduate Students	2019
First Prize	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"