

QIAN GE

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Current and Previous Academic Positions

University of Tokyo Visiting Associate Professor Department of Civil Engineering, School of Engineering	Mar 2025 –
Southwest Jiaotong University Associate Professor Department of Information Systems and Operations Management, School of Economics and Management	Feb 2025 –
Southwest Jiaotong University Associate Professor Department of Traffic Engineering, School of Transportation and Logistics	Oct 2019 – Jan 2025 tenured in 2021
Imperial College London Visiting Researcher Department of Civil and Environmental Engineering	May 2017 – Jun 2017
Tokyo Institute of Technology Research Fellow Department of Civil and Environmental Engineering	Mar 2017 – Sept 2019 <i>Tejima Seichi Award</i>

Education

Tokyo Institute of Technology <i>Ph.D. in Transportation Engineering</i> ↔ Advisor: Prof. Daisuke Fukuda Thesis: <i>Data-Driven and Macroscopic Approaches for Estimating Origin-Destination Travel Demand</i> Department of Civil and Environmental Engineering	Oct 2013 – Mar 2017 <i>Kikkawa-Yamaguchi Award</i> <i>MEXT Scholarship</i>
Tokyo Institute of Technology <i>Research Student (non-degree)</i> Department of Civil and Environmental Engineering	Oct 2012 – Sept 2013 <i>MEXT Scholarship</i>
Tsinghua University <i>M.E. in Logistics Engineering</i> Department of Industrial Engineering and Shenzhen Graduate School	Sept 2010 – Jun 2012
Southeast University <i>B.M. in Engineering Management</i> School of Civil Engineering	Sept 2006 – Jun 2010

Awards

Science and Technology Progress Award of ITS China, 2nd Prize	November 2024
Seiichi Tejima Award	January 2019
Kikkawa-Yamaguchi Award	December 2018
16th Behavior in Networks Research Workshop Award	October 2017
MEXT Scholarship for doctoral students	October 2013-October 2016
MEXT Scholarship for research students	October 2012-October 2013

Publications

I have published 9 journal articles in the fields of transportation, smart cities, and related areas, including 6 in the prestigious *Transportation Research* series and 2 in special issues of the *International Symposium on Transportation and Traffic Theory (ISTTT)*.

Journal Articles

- [1] Wen Ji, Ke Han, and **Qian Ge**. Route planning of mobile sensing fleets for repeatable environmental monitoring tasks. *Computers, Environment and Urban Systems*, 119:102285, 2025.
- [2] Shenglin Liu, **Qian Ge***, Ke Han, Daisuke Fukuda, and Takao Dantsuji. Mechanism design for coordinating vehicle-based mobile sensing tasks within the ride-hailing platform. *Transportation Research Part C: Emerging Technologies*, 176:105151, 2025.

[3] Ke Han, Tao Huang, Wenbo Fan, **Qian Ge**, Shihui Dong, and Xuting Wang. Macroscopic fundamental diagram with volume–delay relationship: Model derivation, empirical validation and invariance property. *Transportation Research Part C: Emerging Technologies*, 166:104739, 2024.

[4] Yuxin Hong, Weiyang Yan, and **Qian Ge***. Designing sustainable logistics networks for classified municipal solid wastes collection and transferring with multi-compartment vehicles. *Sustainable Cities and Society*, 99:104921, 2023.

[5] **Qian Ge**, Ke Han, and Xiaobo Liu. Matching and routing for shared autonomous vehicles in congestible network. *Transportation Research Part E: Logistics and Transportation Review*, 156:102513, 2021.

[6] Takao Dantsuji, Shin Hirabayashi, **Qian Ge**, and Daisuke Fukuda. Cross comparison of spatial partitioning methods for an urban transportation network. *International Journal of Intelligent Transportation Systems Research*, 18:412–421, 2020.

[7] **Qian Ge***, Daisuke Fukuda, Ke Han, and Wenjing Song. Reservoir-based surrogate modeling of dynamic user equilibrium. *Transportation Research Part C: Emerging Technologies*, 113:350–369, 2020.

[8] **Qian Ge*** and Daisuke Fukuda. A macroscopic dynamic network loading model for multiple-reservoir system. *Transportation Research Part B: Methodological*, 126:502–527, 2019.

[9] **Qian Ge*** and Daisuke Fukuda. Updating origin–destination matrices with aggregated data of gps traces. *Transportation Research Part C: Emerging Technologies*, 69:291–312, 2016.

* corresponding author

Grants

PI Chengdu Technology Bureau, China Topic: a mobility-as-a-service system	Jun 2023 – May 2024 ¥100,000
PI Natural Science Foundation of Sichuan Province, China Topic: operational management of the ride-hailing market	Jan 2022 – Dec 2023 ¥100,000
PI National Natural Science Foundation of China Topic: incentive mechanism design for the ride-hailing market	Jan 2021 – Dec 2024 ¥300,000

Teaching

Undergraduate	
Data Structures and Algorithms	Fall 2022-2023, Spring 2023-2024
Traffic Engineering Fundamentals	Spring 2022-2024, Spring 2023-2024 (UESTC)
Database Technologies with Applications	Fall 2019-2021; Spring 2021
Logistics Systems Analysis	Fall 2021, 2023
Graduate	
Advanced Techniques in Information Management	Spring 2026
Big Data Analytics and Intelligent Systems	Fall 2025
Optimization Theory and Methods	Spring 2022-2024
Frontiers in Systems Science	Fall 2020-2023
Systems Science Theory and Methods	Fall 2020-2023

Services

Referee Transportation Research Part A/B/C/D/E, Sustainable Cities and Society, Networks and Spatial Economics, IET Intelligent Transport Systems