

Curriculum Vitae



Dr Jessica Wang Yuan

Associate Professor,
Logistics and Supply Chain Management Programme
School of Business

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Education Qualifications

2012 Ph.D., Industrial Systems Engineering and Management, National University of Singapore

Academic and Professional Experience

2024 - Present Associate Professor, School of Business, Singapore University of Social Sciences
2021 - 2024 Senior Lecturer, School of Business, Singapore University of Social Sciences
2018 - 2021 Research Assistant Professor, Centre for Next Generation Logistics, National University of Singapore
2018 - 2018 Senior Research Fellow, Centre for Next Generation Logistics, National University of Singapore
2014 - 2017 Research Fellow, Department of Industrial System Engineering and Management, National University of Singapore
2013 - 2013 Initiative Leader, P&G International Operations Asia
2011 - 2012 Global Management Trainee, ING Banking Netherland

Memberships and Professional Activities

- **Associate Editor:** Asia-Pacific Journal of Operational Research (2019 to present)
- **Associate Editor:** Journal of Simulation (2019 to present)
- **General Co-Chair:** LOGMS 2019: The 9th International Conference on Logistics and Maritimes Smart Analytics for Maritime and Logistics Systems
- Winter Simulation Conference: PC member
- Journal Reviewer: INFORMS Journal on Computing, Transportation Research B/C/E, IEEE Transactions on Intelligent Transportation Systems, Journal of Production Research, Computers & Operation research.
- Membership: INFORMS, ORSS

Research Interests

- Data-Driven Intelligent Traffic Planning and Management
- Digital Twin and AI for Logistics and Transportation Systems
- Large Language Models for Operations Research Problems

Selected Publications

(only recent JCR Q1 Journals and CORE A* papers are listed)

- Yun Hui Lin, Qingyun Tian, Dongdong He, **Yuan Wang**. Revisiting Stackelberg p-median problem with user preferences. *Computers & Operations Research*, Vol 161, page 106429, 2024.
- Jintao You, **Yuan Wang***, Zhaojie Xue. An exact algorithm for the multi-trip container drayage problem with truck platooning, *Transportation Research Part E: Logistics and Transportation Review*, Vol 175, page 103138, 2023.
- Ziyang Xiao, Dongxiang Zhang, Yangjun Wu, Lilin Xu, **Yuan Jessica Wang**, Xiongwei Han, Xiaojin Fu, Tao Zhong, Jia Zeng, Mingli Song, Gang Chen. Chain-of-Experts: When LLMs Meet Complex Operations Research Problems. *The Twelfth International Conference on Learning Representations (ICLR) 2023/10/13*.

(CORE A* Conference)

- Dongxiang Zhang, Ziyang Xiao, **Yuan Wang**, Mingli Song, Gang Chen. Neural TSP solver with progressive distillation. *Proceedings of the AAAI Conference on Artificial Intelligence*. 37(10), 12147-12154, 2023.

(CORE A* Conference)

- Yun Hui Lin, **Yuan Wang***, Loo Hay Lee, Ek Peng Chew. Omnichannel facility location and fulfillment optimization. *Transportation Research Part B: Methodological*, Vol 163, pages 187-209. 2022
- Yun Hui Lin, **Yuan Wang***, Loo Hay Lee. Profit-Maximizing Parcel Locker Location Problem under Threshold Luce Model, *Transportation Research Part E: Logistics and Transportation Review*, Vol 157, page 102541, 2021.
- Seyyed Amir Babak; **Yuan Wang**; Charkhgard, Hadi. Wave Order Picking Under the Mixed-Shelves Storage Strategy: A Solution Method and Advantages. *Computers & Operations Research*, Vol 137, page 105556, 2021.
- **Yuan Wang**, Linfei Lei, Dongxiang Zhang. Towards delivery-as-a-service: effective neighborhood search strategies for integrated delivery optimization of E-commerce and static O2O parcels. *Transportation Research Part B: Methodological*, Volume 139, 38-63. 2020.
- Albert Vinsensus, **Yuan Wang***, Ek Peng Chew, Loo Hay Lee. Dynamic Incentive Mechanism for Delivery Slot Management in E-Commerce Attended Home Delivery. *Transportation Science*. Volume 54, issue 3, 567-587, 2020.
- **Yuan Wang**, Ying Liu, Dongxiang Zhang, Loo Hay Lee. Enhancing transportation systems via deep learning: A survey. *Transportation Research: Part C, Emerging Technologies* Volume 99, February 2019, Pages 144-163 (ESI Highly Cited Paper)

- Xi Xiang, **Yuan Wang***, Loo Hay Lee. Two-stage conflict robust optimization models for cross-dock truck scheduling problem under uncertainty. *Transportation Research Part E: Logistics and Transportation Review*. Volume 144, December 2020, Pages 102123.
- Yunhui Lin, **Yuan Wang**, Dongdong He, Loo Hay Lee, Last-mile delivery: Optimal locker location under multinomial logit choice model. *Transportation Research Part E: Logistics and Transportation Review*, Volume 142, October 2020, Pages 102059.
- Zhenyong Wu, Lina He, **Yuan Wang***, Mark Goh, Xinguo Ming, Knowledge recommendation for product development using integrated rough set-information entropy correction. *Journal of Intelligent Manufacturing*, 31, pages1559–1578(2020). (ESI Highly Cited Paper)
- **Yuan Wang**, Dongxiang Zhang, Ying Liu, Kian-Lee Tan. Trajectory Forecasting with Neural Networks: An Empirical Evaluation and A New Hybrid Model. *IEEE Transactions on Intelligent Transportation Systems*, PP(99):1-10 · September 2019.
- **Yuan Wang***, Dongxiang Zhang, Lu Hu, Yang Yang, Loo Hay Lee, A Data-Driven and Optimal Bus Scheduling Model with Time-Dependent Traffic and Demand, *IEEE Transactions on Intelligent Transportation Systems*, 2017, P1-10. (ESI Highly Cited Paper)
- **Yuan Wang***, Xinjia Jiang, Loo Hay Lee, Ek Peng Chew, Kok Choon Tan. Tree based searching approaches for integrated vehicle dispatching and container allocation in a transshipment hub. *Expert Systems with Applications*, Vol 74, pages139-150,2017
- Gang Hu, Jie Shao, Fenglin Liu, **Yuan Wang**, Heng Tao Shen. IF-Matching: Towards Accurate Map-Matching with Information Fusion. *IEEE Transactions on Knowledge and Data Engineering*, Vol 29, issue 1, pages 114-127, 2017.
- **Yuan Wang**, Dongxiang Zhang, Qing Liu, Fumin Shen, Loo Hay Lee, Towards enhancing the last-mile delivery: An effective crowd-tasking model with scalable solutions, *Transportation Research Part E: Logistics and Transportation Review*, Volume 93, September 2016, P279-293.
- Lu Hu, Juanxiu Zhu, **Yuan Wang**, Loo Hay Lee, Joint Design of Hub Location, Hub Capacity and Fleet Size for Third-party Logistics Networks with Road Congestion Constrains. *Transportation Research Part E: Logistics and Transportation Review*, Volume 118, October 2018, Pages 568-588.
- Dingyu Yang, Jianmei Guo, Zhi-Jie Wang, **Yuan Wang**, Jingsong Zhang, Liang Hu, Jian Yin. FastPM: An approach to pattern matching via distributed stream processing. *Information Science*, Vol 453, Pages 263-280, 2018

Awards

- **Best Student Paper Award:** The 3rd International Symposium on Multimodal Transportation (ISMT 2019). “Last-mile Delivery: Optimal Locker Location Under Multinomial Logit Choice Model.”
- **1st Runner-up position** in the 4th edition of the MaritimeONE Case Summit 2023: Coached students from the bachelor’s degree in Logistics and Supply Chain Management (SCM).

Updated on 29 July 2024