Xu Xin, David

(+852) 5697-6325 | xu-david.xin@connect.polyu.hk[1] | xinxu.space | ResearchGate | Google Scholar | LinkedIn

Education

The Hong Kong Polytechnic University | *PhD* 2023.09—2025.10
Supervisor: Prof. Shuaian Wang.

Tongji University | Management Science and Engineering | *Doctor of Management* 2018.09—2025.12
Supervisor: Prof. Xiaoli Wang.

Dalian Maritime University | Logistics Management | *Bachelor of Management* 2014.09—2018.06
Supervisors: Prof. Zhongzhen Yang and Prof. Kang Chen. **GPA: 4.2/5.0 (Rank: 1/32)**.

Work Experience

The Hong Kong Polytechnic University | *Postdoctoral Fellow* 2025.11—Present
Postdoctoral research supervisor: Prof. Shuaian Wang.

Research Interests & Directions

- **Port and shipping management** (e.g., berth allocation, liner shipping network design, fleet deployment)
- **Transportation and logistics system optimization** (e.g., electric vehicle transportation network design, flow shop scheduling)
- **Emergency management** (e.g., humanitarian transportation network design)

Selected Publications[2]

- Zhang, T., Wang, S., & **Xin, X***. (2025). Liner fleet deployment and slot allocation problem: A distributionally robust optimization model with joint chance constraints. **Transportation Research Part B: Methodological**, 197, 103236. (**ABS 4**, JCR Q1, IF=6.3) **[HTML]**[3]
- **Xin, X.**, Wang, S., & Zhang, T. (2025). Truck-drone supported humanitarian relief logistics network design: A two-stage distributionally robust optimization approach. **Transportation Research Part C: Emerging Technologies**, 178, 105231. (JCR Q1, IF=7.9) **[HTML]**
- **Xin, X.**, Zhang, T., Wang, X., He, F., & Wu, L. (2025). Risk-averse distributionally robust optimization for construction waste reverse logistics with a joint chance constraint. **Computers & Operations Research**, 173, 106829. (**ABS 3**, JCR Q1, IF=4.3) **[HTML]**
- **Xin, X.**, Jiang, Q., Li, C., Li, S., & Chen, K. (2023). Permutation flow shop energy-efficient scheduling with a position-based learning effect. **International Journal of Production Research**, 61(2), 382-409. (**ABS 3**, JCR Q1, IF=7.3) **[HTML]**
- **Xin, X.**, Wang, X., Chen, Z., & Chen, K. (2021). Coastal shuttle tanker inventory routing model with a discrete loaded quantity. **Applied Economics**, 53, 6120-6137. (**ABS 2**, JCR Q2, IF=2.1) **[HTML]**
- **Xin, X.**, Liu, M., Wang, X., Chen, H., & Chen, K. (2022). Investment strategy for blockchain technology in a shipping supply chain. **Ocean & Coastal Management**, 226, 106263. (JCR Q1, IF=5.4) **[HTML]**
- **Xin, X.**, Liu, M., Wang, X., Zhang, T., Gao, L., & Chen, K. (2022). Evolutionary analysis of Japan's nuclear wastewater discharge events considering the impact of participants' emotions. **Ocean & Coastal Management**, 225, 106231. (JCR Q1, IF=5.4) **[HTML]**
- **Xin, X.**, Zhang, T., He, F., Zhang, W., & Chen, K. (2023). Assessing and simulating changes in ecosystem service value based on land use/cover change in coastal cities: A case study of Shanghai, China. **Ocean & Coastal Management**, 239, 106591. (JCR Q1, IF=5.4) **[HTML]**
- **Xin, X.**, Zhang, T., Xiang, Z., & Liu, M. (2025). Battery electric vehicle transportation network robust pricing-infrastructure location model with boundedly rational travelers. **Applied Energy**, 386, 125606. (JCR Q1, IF=11.0) **[HTML]**
- **Xin, X.**, Wang, X., Ma, L., Chen, K., & Ye, M. (2022). Shipping network design–infrastructure investment joint optimization model: a case study of West Africa. **Maritime Policy & Management**, 49(5), 620-646. (**ABS 2**, JCR Q2, IF=3.6) **[HTML]**
- Liu, M., **Xin, X.***, Wang, X., Zhang, T., & Chen, K. (2025). Dual-channel slot sales strategy for container liner shipping companies with blockchain technology adoption. **Transport Policy**, 162, 200-220. (**ABS 2**, JCR Q1, IF=5.3) **[HTML]**
- Li, D., **Xin, X.***, & Zhou, S. (2023). Integrated governance of the Yangtze River Delta port cluster using niche theory: A case study of Shanghai Port and Ningbo-Zhoushan Port. **Ocean & Coastal Management**, 234, 106474. (JCR Q1, IF=5.4, **ESI Top 1%**) **[HTML]**
- Xiang, Z., **Xin, X.***, Zhang, T., Chen, K., & Liu, M. (2025). Asia–Europe liner shipping network design model considering Arctic route and black carbon tax. **Ocean & Coastal Management**, 261, 107492. (JCR Q1, IF=5.4) **[HTML]**
- Gao, S., **Xin, X.***, Li, C., Liu, Y., & Chen, K. (2022). Container ocean shipping network design considering carbon tax and choice inertia of cargo owners. **Ocean & Coastal Management**, 216, 105986. (JCR Q1, IF=5.4) **[HTML]**

[1] Underlined content contains hyperlinks. [2] Symbol "*" represents corresponding author. [3] Content in bold brackets contains hyperlinks.

- Chen, K., Guo, J., **Xin, X.***, Zhang, T., & Zhang, W. (2023). Port sustainability through integration: A port capacity and profit-sharing joint optimization approach. **Ocean & Coastal Management**, 245, 106867. (JCR Q1, IF=5.4) **[HTML]**
- Li, Z., Wang, L., Wang, G., **Xin, X.***, Chen, K., & Zhang, T. (2024). Investment and subsidy strategy for low-carbon port operation with blockchain adoption. **Ocean & Coastal Management**, 248, 106966. (JCR Q1, IF=5.4) **[HTML]**
- Chen, K., Su, S., Gong, Y., **Xin, X.***, & Zeng, Q. (2024). Coastal transportation system green policy design model based on shipping network design. **International Journal of Logistics Research and Applications**, 27(3), 428-449. (**ABS 1**, JCR Q1, IF=4.9) **[HTML]**

Book

- Wang, X., **Xin, X**, Gao, L., & Shen, S. (2021). Logistics, Transportation, and Distribution Management (Second Edition). **Tsinghua University Press**. **[HTML]**

Honors & Awards

Honors

- *2017.12*, National Scholarship
- *2019.12*, National Scholarship
- *2023.12*, National Scholarship
- *2024.04*, HKSAR Government Scholarship Fund – Reaching Out Award **[HTML]**
- *2025.04*, HKSAR Government Scholarship Fund – Talent Development Scholarship **[HTML]**
- *2025.05*, Outstanding Graduate of Shanghai Universities

Competitions

- *2016.05*, National 2^{nd} Prize in the 11^{th} National Competition of Transport Science and Technology for Students (NACTranS)
- *2016.05*, National 2^{nd} Prize in the 2^{nd} National Shipping Innovation Competition for College Students
- *2019.12*, National 2^{nd} Prize in the 16^{th} China Post-Graduate Mathematical Contest in Modeling
- *2021.10*, Bronze Award in the 7^{th} China College Students' "Internet+" Innovation and Entrepreneurship Competition
- *2022.08*, National 1^{st} Prize in the 15^{th} National College Social Practice and Science Contest on Energy Saving & Emission Reduction **[HTML]**
- *2023.04*, Bronze Award in the 8^{th} China College Students' "Internet+" Innovation and Entrepreneurship Competition
- *2024.08*, National 2^{nd} Prize in the 17^{th} National College Social Practice and Science Contest on Energy Saving & Emission Reduction
- *2025.05*, National 2^{nd} Prize in the 20^{th} National Competition of Transport Science and Technology for Students (NACTranS) (Instructor: Prof. Shuaian Wang) **[HTML]**
- *2025.05*, Guide students to win the National 1^{st} Prize (alow win the Outstanding Instructor Award) in the 15^{th} National Market Research and Analysis Competition **[HTML]**

Conferences

- *2020.11.5-7*, The 3^{rd} International Conference of the Yangtze-River Research and Innovation Belt (Y-RIB), Ningbo, China. Topic: *Intermodal Cargo-Container Joint Flow Equilibrium and Pricing.* **[HTML]**
- *2024.3.24-28*, The 2^{nd} International Symposium on Data-Driven Intelligent Optimization for Decision Making (DIODM 2024), Matsue, Japan. Topic: *Port sustainability through integration: A port capacity and profit-sharing joint optimization approach.* **[HTML]**
- *2024.8.29-30*, The 2^{nd} PolyU Research Student Conference (PRSC 2024), Hong Kong, China. Topic: *Liner shipping fleet planning with uncertain demand: a data-driven distributionally robust chance-constrained optimization approach.* Award: **Best Presentation Award**. **[HTML]**
- *2025.7.2-4*, The 3^{rd} PolyU Research Student Conference (PRSC 2025), Hong Kong, China. Topic: *Liner fleet deployment and slot allocation problem: A distributionally robust optimization model with joint chance constraints.* Award: **Best Paper Merit**. **[HTML]**

Academic Services

- **Conference Organization:** The 3^{rd} PolyU Research Student Conference (PRSC 2025), 2-4 July 2025, Hong Kong, China. Position: General Co-chair. **[HTML]**
- **Editorship:** PLOS ONE (Academic Editor) **[HTML]**; Frontiers in Marine Science (Guest Editor) **[HTML]**
- **Ad Hoc Journal Reviewer:** Transportation Research Part B: Methodological; Transportation Research Part E: Logistics and Transportation Review; Transport Policy; IEEE Transactions on Engineering Management; Computers & Operations Research; Computers in Industry; Computers & Industrial Engineering; Maritime Policy & Management; Maritime Economics & Logistics; Applied Economics; Applied Energy; Cities; International Journal of Shipping and Transport Logistics; Research in Transportation Economics; International Journal of Logistics; Advanced Engineering Informatics; Ocean & Coastal Management