

Xu Xin, David


Hong Kong & Shanghai, PR China

Ph.D. Student

The Hong Kong Polytechnic University & Tongji University

☎ (+852) 5697-6325, (+86) 183-4082-9339

✉ xu-david.xin@connect.polyu.hk

📧 Research Gate  LinkedIn

🌐 Homepage  Google Scholar

🎓 EDUCATION

- **The Hong Kong Polytechnic University (Dual PhD Degree)** 2023.09 - 2025.10 (Expected)
Ph.D. Student. Supervisor: Prof. Shuaian Wang Hong Kong, China
- **Tongji University** 2018.09 - 2025.10 (Expected)
Ph.D. Student. Supervisor: Prof. Xiaoli Wang Shanghai, China
- **Dalian Maritime University** 2014.09 - 2018.06
BMgt in Logistics Management. Supervisors: Prof. Zhongzhen Yang and Prof. Kang Chen Dalian, China

🔬 RESEARCH INTERESTS & DIRECTIONS

- **Port management** (e.g., berth allocation, berth allocation and quay crane assignment)
- **Shipping management** (e.g., liner shipping network design, vessel scheduling)
- **Transportation and logistics system optimization** (e.g., electric vehicle transportation network design)
- **Emergency management** (e.g., humanitarian transportation network design)

📖 SELECTED PUBLICATIONS

- 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) [\[HTML\]](#)
- **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) [\[HTML\]](#)

- 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*. [\[HTML\]](#)

CONFERENCES

- 2020.11.5-7, The 3rd International Conference of the Yangtze-River Research and Innovation Belt (Y-RIB), Ningbo, China. Topic: *Intermodal Cargo-Container Joint Flow Equilibrium and Pricing*.
- 2024.3.24-28, The 2nd 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 2nd 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 3rd 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 3rd PolyU Research Student Conference (PRSC 2025), 2-4 July 2025, Hong Kong. Position: General Co-chair of the Organization Committee. [\[HTML\]](#)
- **Editorship**: PLOS ONE (Academic Editor), Frontiers in Marine Science (Guest Editor)
- **Ad Hoc Journal Reviewer**: Transportation Research Part B: Methodological; Transportation Research Part E: Logistics and Transportation Review; Transport Policy; Maritime Policy & Management; Computers & Operations Research; Maritime Economics & Logistics; International Journal of Shipping and Transport Logistics; Applied Energy; Energy; Computers & Industrial Engineering; Research in Transportation Economics; IEEE Transactions on Engineering Management; International Journal of Logistics; Cities; Computers in Industry

HONORS AND AWARDS

Honors

- 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 2nd Prize in the 11th National Competition of Transport Science and Technology for Students (NACTranS) (Instructor: Prof. Zhongzhen Yang)
- 2016.05 National 2nd Prize in the 2nd National Shipping Innovation Competition for College Students (Instructor: Prof. Kang Chen)
- 2019.12 National 2nd Prize in the 16th China Post-Graduate Mathematical Contest in Modeling
- 2021.10 National 3rd Prize (Bronze Award) in the 7th China College Students' "Internet+" Innovation and Entrepreneurship Competition
- 2022.08 National 1st Prize in the 15th National College Social Practice and Science Contest on Energy Saving & Emission Reduction [\[HTML\]](#)
- 2025.05 National 2nd Prize in the 20th National Competition of Transport Science and Technology for Students (NACTranS) (Instructor: Prof. Shuaian Wang) [\[HTML\]](#)
- 2025.05 Guide students to win the National 1st Prize (Outstanding Instructor Award) in the 15th National Market Research and Analysis Competition [\[HTML\]](#)