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Education

•The Hong Kong Polytechnic University (Dual PhD Degree) *2023.09 - 2025.10 (Expected)*
Ph.D. Student. Supervisor: Prof. Shuaian (Hans) Wang Hong Kong, China

•Tongji University *2018.09 - 2025.09 (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, 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, humanitarian logistics** (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. **[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. **[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. **[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. **[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. **[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. **[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. **[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. **[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. **[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. **[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. **[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. (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. **[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. **[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. **[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. **[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. **[HTML]**

- Liu, M., Lai, K.-h., Wong, C. W., **Xin, X.**, & Lun, V. Y. (2024). Smart ports for sustainable shipping: concept and practices revisited through the case study of China's Tianjin port. **Maritime Economics & Logistics**, 1-46. **[HTML]**
- Chen, K., Yi, X., **Xin, X.***, & Zhang, T. (2023). Liner shipping network design model with carbon tax, seasonal freight rate fluctuations and empty container relocation. **Sustainable Horizons**, 8, 100073. **[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.
- **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; Computers & Industrial Engineering; Research in Transportation Economics; IEEE Transactions on Engineering Management; International Journal of Logistics; Cities; Computers in Industry

Honors and Awards

Honors

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

Competitions

- *2016.05* Win the National 2nd Prize in the 11th National Competition of Transport Science and Technology for Students (NACTranS) (Instructor: Prof. Zhongzhen Yang)
- *2016.05* Win the National 2nd Prize in the 2nd National Shipping Innovation Competition for College Students (Instructor: Prof. Kang Chen)
- *2019.12* Win the National 2nd Prize in the 16th China Post-Graduate Mathematical Contest in Modeling
- *2020.08* Win the National 2nd Prize in the 13th National College Social Practice and Science Contest on Energy Saving & Emission Reduction
- *2021.10* Win the National 3rd Prize (Bronze Award) in the 7th China College Students' "Internet+" Innovation and Entrepreneurship Competition
- *2022.08* Win the National 1st Prize in the 15th National College Social Practice and Science Contest on Energy Saving & Emission Reduction **[HTML]**
- *2025.05* Win the 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]**