

# Xu Xin, David

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## EDUCATION

**The Hong Kong Polytechnic University** | *PhD Student (Dual PhD Degree)* 2023.09–2025.10 (Expected)  
Supervisor: Prof. Shuaian Wang

**Tongji University** | Management Science and Engineering | *PhD Student* 2023.09–2025.10 (Expected)  
Supervisor: Prof. Xiaoli Wang

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

## 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<sup>2</sup>

- 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]<sup>3</sup>
- 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]

<sup>1</sup> Underlined content contains hyperlinks.    <sup>2</sup> Symbol “\*” represents corresponding author.    <sup>3</sup> Content in bold brackets contains hyperlinks.

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