# Xu Xin, David

#### **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* 

2018.09—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, fleet depolyment, 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>&</sup>lt;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]

### Воок

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

## **6** 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  $2^{nd}$  Prize in the  $2^{nd}$  National Shipping Innovation Competition for College Students (Instructor: Prof. Kang Chen)
- 2019.12, National  $2^{nd}$  Prize in the  $16^{th}$  China Post-Graduate Mathematical Contest in Modeling
- $\bullet$  2021.10, Bronze Award in the  $7^{th}$  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 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  $1^{st}$  Prize (allow win the Outstanding Instructor Award) in the  $15^{th}$  National Market Research and Analysis Competition [HTML]

#### CONFERENCES

- 2020.11.5-7, The 3<sup>rd</sup> 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<sup>nd</sup> 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<sup>nd</sup> 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<sup>rd</sup> 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; 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