

Kexin Lin

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Education

Worcester Polytechnic Institute , Worcester, MA Ph.D. in Business Administration	Expected 2027
University of Science and Technology of China , Hefei, China M.Sc. in Management Science and Engineering	2021–2023
North China Electric Power University , China B.Eng. in Engineering Cost	2017–2021

Research Interests

- Operational analytics for sustainability and energy systems
- Performance evaluation using data envelopment analysis (DEA)
- Supply chain and operations management in digital economies
- Big data benchmarking and empirical modeling

Teaching Interests

- Operations management
- Business analytics
- Operations research
- Performance analytics and benchmarking
- Process modeling and optimization
- Sustainability and energy systems analytics

Publications

- **K. Lin**, and J. Zhu. “Enhancing Deep Learning with Data Envelopment Analysis: Market-Oriented Recommendation System for Non-Fungible Tokens.” *Annals of Operations Research*, 2026.
- Wu, J., **K. Lin**, and J. Sun. “Improving Urban Energy Efficiency: What Role Does the Digital Economy Play?” *Journal of Cleaner Production* 418, 138104, 2023.
- Wu, J., **K. Lin**, and J. Sun. “Pressure or Motivation? The Effects of Low-Carbon City Pilot Policy on China’s Smart Manufacturing.” *Computers & Industrial Engineering* 183, 109512, 2023.
- Wu, J., **K. Lin**, and J. Sun. “The Impact of Smart City Construction on Urban Energy Efficiency: Evidence from China.” *Environment, Development and Sustainability*, 2024.

Working Papers

- **Lin, K.**, and J. Zhu. “NBDE: Nash Bargaining DEA–Enhanced Clustering Model.” Working paper.
-*Highlights*: We develop a performance-guided DEA clustering model where negotiated weight profiles provide clustering criteria. The approach adopts an iterative procedure to reduce within-cluster dispersion. A machine learning assisted search mechanism supports clustering exploration. Simulation results show coherent within-cluster profiles and clear cross-cluster separation.

Conference Presentations

- “NBDE: Nash Bargaining DEA–Enhanced Clustering Model.” WPI Business School PhD Seminar, 2026.
- “Enhancing Deep Learning with Data Envelopment Analysis: Market-Oriented Recommendation System for Non-Fungible Tokens.” Decision Sciences Institute Annual Meeting, 2025; INFORMS Annual Meeting, 2025; WPI Business School PhD Seminar, 2025.

Teaching Experience

Teaching Assistant, Worcester Polytechnic Institute

2024–present

- **OIE 4410:** *Case Studies in Industrial Engineering* (Undergraduate), responsibilities: grading, office hours, project guidance, and guest lecture on Data Envelopment Analysis (DEA).
- **OIE 548:** *Performance Analytics* (Graduate), responsibilities: grading, office hours, and project guidance.
- **OIE 552:** *Modeling and Optimizing Processes* (Graduate), responsibilities: grading, office hours, and project guidance.

Honors and Awards

- Conference Travel Grant, Worcester Polytechnic Institute, 2025

Professional Service

- Ad Hoc Reviewer, *Ecological Indicators* — 5 completed manuscript reviews

Technical Skills

MATLAB, Python, R, Stata

Languages

Chinese (Native), English (Fluent)