Kaiwen Li

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https://checcoli.com

Education

International Business School, Beijing Foreign Studies University — Beijing, China
M.Sc. in Management Science and Engineering — 2022 - 2025 (*expected*)

- Advisor: Prof. Xi Chen
- GPA: 3.79/4.00, Rank: 1/24.
- Courseworks: Machine Learning, Optimization, Advanced Statistics

School of European Language, Beijing Foreign Studies University — Beijing, China
B.A. in Italian Language and Literature — 2018 - 2022

Publications

1. Xi Chen, **Kaiwen Li**, Sidian Lin, Xiaosong Ding. Technician routing and scheduling with employees' learning through implicit cross-training strategy. *International Journal of Production Economics*, 2024.
   - Model: Markov Decision Process and Vehicle Routing Problem
   - Algorithm: Approximate Dynamic Programming
2. Xiaosong Ding, Chong Feng, Peiling Yu, **Kaiwen Li**, Xi Chen. Gradient boosting decision tree in the prediction of NOx emission of waste incineration. *Energy*, 2023.
   - Implemented machine learning algorithms including GBDT, Transformer, GNN.
   - Processed large-scale industrial data.

Working Papers

1. Optimal Provision of Data via Collaborative Learning Platforms Under Competition. *Work in progress with Prof. Mingxi Zhu at Georgia Tech*.
   - Presented by Prof. Mingxi Zhu at INFORMS Annual Meeting 2024.
   - Study incentives for firms to participate in collborative learning platform with potential competitors, thereby potentially compromising their competitive advantage through analyzing data quantity and quality.
2. Near-Optimal Cost Function Approximation for Multi-Period Technician Routing and Scheduling. *Work in progress with Prof. Xi Chen*.
   - Presented at INFORMS Annual Meeting 2024.
   - Leverage the relationship between regularization and robust optimization to construct novel cost function for multi-stage problems.
3. Xi Chen, **Kaiwen Li**, Xiaosong Ding. Measuring the robustness of international agricultural trade: A Complex Network Approach. *Under Review*.

Awards and Honors

- **Chinese National Scholarship (Top 2%)** — 2024
- **First Class Scholarship**, Beijing Foreign Studies University — 2022-2023
- **Finalist Winner (Top 1%)**, The Mathematical Contest in Modeling — 2021
- **Third Prize**, "Challenge Cup" Academic Works Competition — 2021

Funding

- **Student Research Funds: Key Project**, ¥10,000 (∼ $1,400) — 2023-2024
  Role: Principal Investigator, Beijing Foreign Studies Univeristy
- **Research Funds for the Central Universities**, ¥360,000 (∼ $50,000) — 2022-2024
  Role: Co-Investigator, Beijing Foreign Studies University
- **Student Research Funds: General Project**, ¥5,000 (∼ $700) — 2021-2022
  Role: Principal Investigator, Beijing Foreign Studies Univeristy

Skills

Languages: Chinese, English, Italian, Maltese, Japanese.

Programming: `Python`, `C/C++`, `Mathematica`, `MATLAB`, `Julia`.

Teaching

Teaching Assistant, Introduction to Operations Research (Graduate) — Spring 2024

Teaching Assistant, Probability and Statistics (Undergraduate) — Fall 2023