CHEN, LI

[Institute of Operations Research and Analytics](#)   🔗 https://chenli-ora.github.io
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RESEARCH INTERESTS

Methodologies: Optimization under Uncertainty, Data-Driven Decision Making, Conic Optimization
Applications: Business Analytics, Supply Chain Management, Smart City Operations

EDUCATION

National University of Singapore   *August 2017 - July 2022*
Ph.D. in Operations Research and Analytics
Thesis: "Optimization under uncertainty using exponential cones"

University of Science and Technology of China   *August 2013 - June 2017*
BSc in Computational Mathematics, Hua Loo-Keng Talent Program

WORKING PAPERS

"Robust CARA Optimization" (with Melvyn Sim)

- Under major revision at *Operations Research*

"Robust Explainable Prescriptive Analytics" (with Melvyn Sim, Xun Zhang, Long Zhao and Minglong Zhou)

- In preparation for submission to *Operations Research*

PUBLICATIONS

"An Exponential Cone Programming Approach for Managing Electric Vehicle Charging" (with Long He and Yangfang (Helen) Zhou)

- *Operations Research*, 2023+

"Mitigating the Financial Risk Behind Emission Cap Compliance: A Case in Maritime Transportation" (with Qinghe Sun, Qiang Meng, Mabel Chou)

- *Production and Operations Management*, 2023

"Evaluating Port Efficiency Dynamics: A Risk-based Approach" (with Qinghe Sun and Qiang Meng)

- *Transportation Research Part B: Methodological*, 2022

WORK-IN-PROGRESS

- "A Conic Optimization Approach to Service Level Analysis under Supply Chain Disruptions" (with Qinghe Sun and Mabel Chou)

- "Sub-Gaussian Estimation and Optimization" (with Melvyn Sim)

- "Entropic Robust Optimization"

TEACHING EXPERIENCE

- DBA3701: Introduction to Optimization (Undergraduate in Business), TA, Fall 2018, 2022

- BDC6304: Robust Modelling and Optimization (Ph.D. level), TA, Spring 2022

- Optimization in Data Science & Machine Learning (NUS Graduate Summer School), Tutor, 2022

- MA5268: Theory and Algorithm for Nonlinear Optimization (Ph.D. level), TA, Fall 2019

- MA3252: Linear and Network Optimization (Undergraduate in Math), Tutor, Spring 2019

CONFERENCE PRESENTATIONS

- Robust Explainable Prescriptive Analytics
  - *INFORMS Annual Meeting 2022*
  - *POMS-HK International Conference 2023*
- Robust CARA Optimization
  - *INFORMS Annual Meeting 2021*
- An Exponential Cone Programming Approach for Managing Electric Vehicle Charging
  - *CSAMSE Annual Conference 2019, 2021*
  - *INFORMS Annual Meeting 2019, 2021*
  - *POMS 31st Annual Conference 2021*
  - *MSOM Conference 2021*

PROFESSIONAL SERVICE

- Referee for *Operations Research, Transportation Research Part B: Methodological, Mathematical Programming Computation*

- Organization Committee for *Analytics for X Conference 2022*

- Session Chair for *Analytics for X Conference 2021, 2022; INFORMS Annual Meeting 2022*

- Student Helper for *MSOM Conference 2019*

SELECTED GRADUATE COURSES

Introduction to Data Analytics, Foundations of Inventory Management, Discrete Optimization and Algorithms, Robust Modeling and Optimization, Topics I: Inequalities for High-Dimensional Statistics, Theory and Algorithms for Online Learning, Theory and Algorithms for Dynamic Programming, Randomized Algorithms, Surrogate and Metaheuristic Global Optimization, Econometric Modeling and Applications II, Advanced Probability Theory