

Hailong Sun

CONTACT INFORMATION

Institute of Operations Research and Analytics
National University of Singapore
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🌐 <https://hl-sun.github.io>
——— Updated on October 2, 2021 ———

RESEARCH INTERESTS

Stochastic and Robust Optimization; Data-driven Decision Making; Online Learning and Online Convex Optimization; Pricing Analytics and Revenue Management; Discrete Choice Modeling; Analytics for Social Good

EDUCATION

National University of Singapore, Singapore Aug. 2017 – Jun. 2022 (expected)
PhD Candidate in Operations Research

- Thesis: “Bundle Design and Pricing: Theory and Applications”
- Advisors: Chung Piaw Teo and Xiaobo Li

South China University of Technology, Guangzhou, China Sep. 2014 – Jul. 2017
M.Eng. in Management Science and Engineering

Ocean University of China, Qingdao, China Sep. 2007 – Jun. 2011
B.Eng. in Environmental Engineering

WORKING PAPERS

“Convex Optimization for Bundle Size Pricing Problem”, with Xiaobo Li and Chung Piaw Teo. *Management Science*, forthcoming, 2021 [\[link\]](#)

- Preliminary version: *Proceedings of ACM Conference on Economics and Computation (EC)*, 2020

“Product Bundle Recommendation and Pricing: How to Make It Work?”, with Xiaobo Li and Chung Piaw Teo. Under review at *Management Science*, 2021 [\[link\]](#)

“Robust Capacity Planning and Battery Charging Policy for Electric Vehicle Battery Swap Station”, with Bo Feng and Zuo-Jun Max Shen. Under revision, 2020 [\[link\]](#)

WORK-IN- PROGRESS

“Airline Fare Family Pricing under Cross Moment Model”, with Changchun Liu, Maoqi Liu and Chung Piaw Teo, 2021

“A Hybrid Algorithm for Network Revenue Management with Cancellations and No-shows”, with Guodong Lyu and Tingrui Shi, 2021

“Data-Driven SKU Rationalization for Food Bank Singapore”, with Victor Fernandez, 2021

WORK EXPERIENCE

Singapore Airlines, Singapore Summer 2018
Revenue Management Intern

- Developed models and algorithms for fare family pricing and network revenue management.

Microsoft (China), Guangzhou, China Jan. 2017 – May. 2017
Online Advertising Intern

- Worked on a consulting project to build data management platform for an advertisement company.

	HAIWAN Engineering , Qingdao, China Design Engineer	Aug. 2011 – Jul. 2014
	<ul style="list-style-type: none"> Worked on design projects to make layout and logistics planning for chemical and power plant construction. 	
TEACHING EXPERIENCE	<p>Tutor</p> <ul style="list-style-type: none"> IE4211 Modeling and Analytics (undergraduate) <p>Teaching Assistant</p> <ul style="list-style-type: none"> BDC6248/IE6881 Pricing and Revenue Management (PhD) BDC5101 Deterministic Operations Research Models (MSBA) DAO1704 Decision Analytics using Spreadsheets (undergraduate) 	<p>Spring 2020</p> <p>Fall 2019</p> <p>Spring 2019</p> <p>Fall 2018</p>
CONFERENCE PRESENTATION	<p>Convex Optimization for Bundle Size Pricing Problem</p> <ul style="list-style-type: none"> The 21st ACM Conference on Economics and Computation (EC), online INFORMS Annual Meeting, Seattle Mostly OM Workshop, Shenzhen CSAMSE, online <p>Bundle Recommendation and Pricing: A Simple Mechanism and Its Optimization</p> <ul style="list-style-type: none"> MSOM Conference, online INFORMS Revenue Management and Pricing Section Conference, online CSAMSE, online 	<p>Jul. 2020</p> <p>Oct. 2019</p> <p>Jun. 2019</p> <p>Jul. 2021</p> <p>Jun. 2021</p> <p>Jun. 2021</p> <p>Jul. 2021</p>
HONORS AND AWARDS	<p>NUS Research Scholarship</p> <p>SCUT Academic Scholarship</p>	<p>2017 – 2021</p> <p>2014 – 2017</p>
COMPUTER SKILLS	Python, R, MATLAB, Gurobi, Mosek, L ^A T _E X	
REFERENCES	<div> <p>Chung Piaw Teo (Advisor) Professor NUS Business School National University of Singapore Email: bizteocp@nus.edu.sg</p> <p>Zizhuo Wang Associate Professor School of Data Science The Chinese University of Hong Kong, Shenzhen Email: wangzizhuo@cuhk.edu.cn</p> </div> <div> <p>Xiaobo Li (Advisor) Assistant Professor Department of ISEM National University of Singapore Email: iselix@nus.edu.sg</p> </div>	