

# Haixiang Lan

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## Education

### Columbia University

*Ph.D. in Operations Research (Specialization: Data Science)*

*M.S. in Operations Research*

Advisors: Adam Elmachtoub, Henry Lam

◦ GPA: 4.13/4

### The Chinese University of Hong Kong, Shenzhen (CUHK(SZ))

*B.S. in Applied Mathematics*

◦ GPA: 3.94/4

### University of Cambridge

*Visiting Student*

*New York, United States*

Aug. 2023 - Present

Aug. 2023 - Jun. 2024

*Shenzhen, China*

Sept. 2019 - May 2023

*Virtual*

Jul. 2021 - Aug. 2021

## Publications and Preprints

- **Haixiang Lan**, Guillermo Gallego, Zizhuo Wang, Yinyu Ye. LP-based Control for Network Revenue Management under Markovian Demands. In WINE'24: Proceedings of the 20th Conference on Web and Internet Economics, 2024.
- **Haixiang Lan**, Yinjun Wang, Yinyu Ye ( $\alpha$ - $\beta$ ). A Tuning-Free Primal-Dual Splitting Algorithm for Large-Scale Semidefinite Programming. INFORMS Optimization Society Conference (IOS) 2024.
- Adam Elmachtoub, Henry Lam, **Haixiang Lan**, Haofeng Zhang ( $\alpha$ - $\beta$ ). Dissecting the Impact of Model Misspecification of Data-Driven Optimization. In AISTATS'25: Proceedings of the 28th International Conference on Artificial Intelligence and Statistics, 2025.
- **Haixiang Lan**, Luofeng Liao, Adam Elmachtoub, Christian Kroer, Henry Lam, Haofeng Zhang. The Bias-Variance Tradeoff in Data-Driven Optimization: A Local Misspecification Perspective. Submitted.

$\alpha$ - $\beta$ : Authors are listed in alphabetical order.

## Presentations

- A Tuning-Free Primal-Dual Splitting Algorithm for Large-Scale Semidefinite Programming. *INFORMS Optimization Society Conference (March 2024)*.
- LP-based Control for Network Revenue Management under Markovian Demands. *INFORMS Revenue Management and Pricing Section Conference (July 2024)*, *INFORMS Annual Meeting (October 2024)*, *The 20th Conference on Web and Internet Economics (December, 2024)*.
- Dissecting the Impact of Model Misspecification of Data-Driven Optimization. *The 28th International Conference on Artificial Intelligence and Statistics (May, 2025)*.

## Industry Experience

### Amazon

*Applied Scientist Intern*

New York, United States

June 2025 - Aug. 2025

## Honours and Awards

- Cornelius A. Boyle Fellowship (Columbia IEOR Department Fellowship). 2023
- Presidential Award in CUHK(SZ) (highest award for undergraduates) 2023
- Academic Performance Scholarship (Class A) 2019-2022
- Outstanding Undergraduate Student Teaching Fellow 2023
- Half Tuition and Bowen Scholarship 2019-2023
- Dean's list 2019-2023

- Contemporary Undergraduate Mathematical Contest in Modeling: National Second Prize 2021
- Undergraduate Research Award 2021

## Teaching Experience

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At **Columbia University**: Teaching Assistant

- IEOR 4106, Stochastic Models Spring 2024
- IEOR 3106, Stochastic Systems and Applications Fall 2024
- IEOR 4650, Business Analytics Spring 2025, Fall 2025

At **CUHK(SZ)**: Undergraduate Student Teaching Fellow

- CHM 1001, General Chemistry Fall 2020
- MAT 1012, Honours Calculus II Spring 2021
- MAT 2006, Elementary Real Analysis I Fall 2021
- MAT 4001, Numerical Analysis Fall 2022, Spring 2023
- DDA 3005, Numerical Methods Fall 2022
- MAT 3007, Optimization I Spring 2023

## Skills

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**Languages:** English (Fluent, TOEFL 107, GRE 334), Mandarin (Native)

**Computer Languages:** Python, R, Matlab, Julia, Gurobi, COPT,  $\text{\LaTeX}$