

# Hao Hao

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Carnegie Mellon University  
Heinz College of Information Systems and Public Policy  
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**RESEARCH INTEREST** Robust optimization, continuous optimization with applications in supply chain management and machine learning.

**EDUCATION**

<b>Carnegie Mellon University, Heinz College</b>	
Ph.D., Operations Research	2021 - 2026
<b>Carnegie Mellon University, College of Engineering</b>	
M.S., Advanced Infrastructure Systems	2019 - 2021
<b>Imperial College London</b>	
B.Eng., Electrical and Electronic Engineering (First-Class Honours)	2015 - 2019

**JOB MARKET PAPER**

**Robust Paths: Geometry and Computation** [Link to Paper]  
Hao Hao and Peter Zhang  
*Major Revision at Operations Research*  
- First Place, 2025 George Nicholson Student Paper Competition  
- First Place, 2025 INFORMS Computing Society Student Paper Award

**WORKING PAPERS**

**Assessing and Explaining the Efficiency of Urban Transportation Networks**  
Hao Hao, Hai Wang and Peter Zhang  
*To be Submitted to Transportation Science*

**Submodular Learning for Risk-aware Prediction-Optimization: Applications in Distributed Healthcare**  
Hao Hao, Peiyu Wang, Shuwei He, Holly Wiberg, and Peter Zhang  
*Under Preparation*

**TEACHING**

<b>Teaching Assistant</b> , Heinz College, Carnegie Mellon University	
Decision Analytics for Business and Policy	2023, 2024
Decision Making under Uncertainty	2024, 2025
Unstructured Data Analytics	2024

**PRESENTATIONS**

**Robust Paths: Geometry and Computation**  
INFORMS Annual Meeting 2025  
YinzOR, Flash Talk Competition, Carnegie Mellon University 2025  
INFORMS Annual Meeting 2024

**Assessing and Explaining the Efficiency of Urban Transportation Networks**  
INFORMS Annual Meeting 2024

INFORMS Annual Meeting	2023
Canadian Operations Research Society Annual Conference	2021

**PROFESSIONAL SERVICES** Reviewer for: Operations Research, Transportation Science  
Session Chair: 2022 INFORMS Annual Meeting  
Co-Organizer: OR PhD Student Seminar, Heinz College, Carnegie Mellon University

**AWARDS** First Place, George Nicholson Student Paper Competition 2025  
First Place, INFORMS Computing Society (ICS) Student Paper Award 2025  
Winner, George Duncan Award for Excellence in Doctoral Studies for the Second  
Research Paper, Heinz College, Carnegie Mellon University 2025  
Recipient, TCS Presidential Fellowship at Carnegie Mellon University 2022-2023

**ADDITIONALS** **Programming:** Python  
**Interests:** Bouldering, running, cooking