

## Education

- Sep 2024 – **Technion - Israel Institute of Technology**, *PhD, Operations Management*.  
Feb 2028 Advisor: Noa Zychlinski
- Sep 2021 – **Shanghai University**, *Master, Management Science and Engineering*.  
Apr 2024 Admission through recommendation (without entrance examination)
- Sep 2017 – **Harbin University of Science and Technology**, *Bachelor, Statistics*.  
Jun 2021

## Research Interests

Operations Management and Operations Research in Healthcare.

## Working Papers

'\*' means the corresponding author.

- 1 **Cai J\*, Zychlinski N. Expanding Naloxone Accessibility: A Lifesaver or a Risky Setback?**, *PRODUCTION AND OPERATIONS MANAGEMENT*, Major Revision.
  - Winner of the 2025 Doctoral Student Forum of Antai College of Economics and Management, Shanghai Jiao Tong University, July 10, 2025
  - Oral presentation, 2025 ORSIS Annual Meeting, Tel-Aviv, May 6, 2025
  - Poster exhibition, Faculty Research Day, Technion, May 14, 2025

## Published Papers

- 1 **Cai J\*, Zychlinski N. When AI is not enough: Reducing diagnostic errors with radiologist oversight**, *SERVICE SCIENCE*, forthcoming.
- 2 **Zhou J, Cai J\*, Pantelous A, Li Z, Li M. A decision-making framework for supporting an equitable global vaccine distribution under humanitarian perspectives**, *EUROPEAN JOURNAL OF OPERATIONAL RESEARCH*, forthcoming.
  - Winner of the 2024 Doctoral Student Forum of Antai College of Economics and Management, Shanghai Jiao Tong University, July 11, 2024
- 3 **Cai J, Xu R, Zhou J\*, Gu H. Dynamic-spread assessment and kink detection in the early mpox outbreak**, *APPLIED MATHEMATICAL MODELLING*, 2025, 143:115996.
- 4 **Cai J, Zhou J\*. How many asymptomatic cases were unconfirmed in the US COVID-19 pandemic? The evidence from a serological survey**, *CHAOS, SOLITONS AND FRACTALS*, 2022, 164:112630.
- 5 **Li H, Cai J\*. Arithmetic operations and expected values of regular interval type-2 fuzzy variables**, *SYMMETRY-BASEL*, 2021, 13(1):2196.

## Selected Honors

- 2022 **National scholarship for graduates.**
- 2021 **Chinese graduate mathematical contest in modeling – The second prize.**

## Membership

- 1 **Student Membership**, INFORMS.

## Internship

- Nov 2023 – **Data Analyst**, BAOZUN E-COMMERCE, Jing'an District, Shanghai, On-site.  
Mar 2024
  - o Developed Python scripts to batch process Excel files and analyze multi-dimensional sales, KOL live streaming, and logistics data for brands like DESCENTE, Crocs, and Calvin Klein across e-commerce platforms, computing key metrics, promotional period performance, logistics punctuality, and consumer behavior insights.

## Skills

**Python, Matlab, SPSS, Tableau, Latex, Markdown.**