# Hannah Li
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## ACADEMIC APPOINTMENTS

**Columbia Business School**
Assistant Professor                                                                                July '23 – Present

**Massachusetts Institute of Technology**
Postdoctoral Associate                                                                           Sep '22 – July '23

## EDUCATION

**Stanford University**
**Ph.D. Candidate in Operations Research (Management Science & Engineering)**          June 2022
*Awards: Dantzig Dissertation Award 2023, MSOM Service Management SIG Best Paper Award 2023,*
      *INFORMS DEI Best Student Paper Award 2022, RMP Jeff McGill Student Paper Award 2021 (2nd*
      *Place), Best Student Paper Award at ACM EAAMO '21, Dantzig-Lieberman Operations Research*
      *Fellowship, MS&E Department Service Award*

**Pomona College**                                                                                          2016
**Bachelor of Arts in Mathematics**
Thesis: The Manickam-Miklos-Singhi Conjecture in Combinatorics (*Received Distinctions)*
Relevant Coursework: Combinatorics, graph theory, discrete math, abstract algebra, Galois theory
*Awards: Llewellyn Bixby Prize for Excellence in Mathematics; Phi Beta Kappa*

**Budapest Semester in Mathematics**- Budapest, Hungary (*Received High Honors)*          2015

## PAPERS

Published - Journals
- "Experimental Design in Two-Sided Platforms: An Analysis of Bias."
    - With Ramesh Johari, Inessa Liskovich, and Gabriel Weintraub
    - Published in *Management Science* (2022)
    - Featured post on the Management Science Blog
    - Part of the winning thesis for the *INFORMS Dantzig Dissertation Award 2023*
    - *MSOM Service Management SIG Best Paper Award 2023*
    - *RMP Jeff McGill Student Paper Award (2021),* 2nd Place
    - Presented in *MSOM Service SIG 2021*
    - Presented in *Conference on Web and Internet Economics (WINE): Spotlights Beyond Wine*
    - Preliminary version presented in *ACM Conference on Economics and Computation (EC '20).*
- "Novel Characterization and Live Imaging of Schlemm's Canal Expressing Prox-1."
    - With Tan Truong, Young-Kwon Hong, and Lu Chen.
    - *PLoS One,* 2014.

Published – Peer Reviewed Conferences

- "Interference, Bias, and Variance in Two-Sided Marketplace Experimentation: Guidance for Platforms."
  - With Geng Zhao, Ramesh Johari, and Gabriel Weintraub.
  - Accepted to *TheWebConf (WWW) '22*.
  - Presented in *EC '20 Workshop on Design of Online Platforms.*
- "Exploration vs. Exploitation in Team Formation."
  - With Ramesh Johari, Vijay Kamble, and Anilesh K. Krishnaswamy.
  - Accepted to *Conference on Web and Internet Economics (WINE),* 2018.

Working Papers

- "Measuring Strategization in Recommendation: Users Adapt Their Behavior to Shape Future Content."
  - With Sarah Cen, Andrew Ilyas, Jennifer Allen, and Aleksander Madry
  - Major Revision at Management Science.
- "Standardized Tests and Affirmative Action: The Role of Bias and Variance."
  - With Nikhil Garg and Faidra Monachau
  - Working paper*,* Major Revision at *Management Science.*
  - Preliminary version accepted to *ACM Conference in Fairness, Accountability, and Transparency Conference (FAccT), 2021*
  - INFORMS DEI Best Student Paper Award '22
  - Best Paper with a Student Presenter Award at *ACM Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO) '21.*
- "Randomized Controlled Trials of Service Interventions: The Impact of Capacity Constraints."
  - With Justin Boutilier, Jonas Jonasson, and Erez Yoeli.
  - Presented at the MIT Conference on Digital Experimentation (CODE), plenary session
- "When Does Interference Matter? Decision-Making in Platform Experiments."
  - With Ramesh Johari, Anushka Murthy, and Gabriel Weintraub.
  - Presented at the MIT Conference on Digital Experimentation (CODE), invited session
- "Wikipedia Contributions in the Wake of ChatGPT."
  - With Daron Acemoglu, Dan Huttenlocher, Charles Lyu, Asu Ozdaglar, and James Siderius.
- "Matching of Users and Creators in Two-Sided Markets with Departures."
  - With Dan Huttenlocher, Charles Lyu, Asu Ozdaglar, and James Siderius.

## INDUSTRY EXPERIENCE

**Vinted**
*Research Consultant*      2021-2022
Launched experiments designed to reduce interference bias.

**Common App**
*Volunteer Consultant*      2021-2022
Using data science to promote equitable and accessible college education.

**Airbnb**
*Data Science Intern*      Jun '19 – Sep '19
Implementing causal inference methods to assess marketplace features.

**Opendoor**
*Data Science Intern*                                                      Jun '18 – Sep '18
Implementing causal inference methods to optimize real estate pricing.

**State Street Global Advisors / Worcester Polytechnic Institute**
*Math Finance Intern/Researcher*                                          May '14– Aug '14
Developing liquidity metrics to assess financial portfolio risk.

## TEACHING

Columbia Business School
- MBA Operations Management
- PhD – Generative AI: Technical and Social

## AWARDS AND RECOGNITION

- INFORMS Dantzig Dissertation Award (2023) for the "best dissertation in any area of operations research and the management sciences that is innovative and relevant to practice"
- INFORMS MSOM Service Management SIG Best Paper Award (2023)
- INFORMS DEI Best Student Paper Award (2022), inaugural award
- INFORMS RMP Jeff McGill Student Paper Award (2021), 2nd place
- *ACM EAAMO* Best Student Paper Award '21
- Dantzig-Lieberman Operations Research Fellowship (Stanford University)
- Management Science & Engineering Department Service Award (Stanford University)
- Llewellyn Bixby Prize for excellence in mathematics (Pomona College)
- Phi Beta Kappa
- National Merit Scholar

## SERVICE AND OUTREACH

Journal reviewing
- *Management Science*
- *Operations Research*
- *Econometrica*
- *Journal of the Royal Statistical Society, Series B*
- *Journal of Causal Inference*

Conference and workshop reviewing
- *MSOM Service Management Special Interest Group (SIG)* review committee
- *Workshop on Platform Analytics (WoPA)*
- *MIT Conference on Digital Experimentation (CODE)*
- *Conference on Web and Internet Economics (WINE)*
- *TheWebConf*
- *ACM Conference on Fairness, Accountability, and Transparency (FAccT)*
- *ACM Conference on Economics and Computation (EC)*
- *ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO)*
- EC'21 Operations of People-Centric Systems Workshop

Award committees
- INFORMS Nicholson Student Paper Competition 2024
- INFORMS RMP Jeff McGill Student Paper Award 2024

Conferences, Workshop, and Seminar Organizing
- Session Chair for INFORMS 2020-2024
- AsuFest 2023
- Stanford Research on Algorithms, Incentives, and Networks (RAIN) Seminar

Service and Outreach
- Senior student mentor at *ACM Economics and Computation (EC '20 and EC '21)*
- Mentor, Stanford Data Science Inclusive Mentoring program
- Stanford MS&E department liaison and student mentor
- Pomona College Math Department liaison

# INVITED TALKS

"Measuring Strategization in Recommendation: Users Adapt Their Behavior to Shape Future Content"
- Bay Area Tech Econ Seminar 2024
- LinkedIn Data Science Seminar 2024
- ACM Conference on Economics and Computation (EC) 2024, presented by Sarah Cen
- MIT Marketing Seminar 2024

"Scaling up Healthcare Interventions using Experimentation"
- INFORMS Annual Meeting 2024
- Society on Educational Effectiveness (SREE) 2024
- Americal Causal Inference Society 2024
- MIT Conference in Digital Experimentation 2023 – Plenary talk
- INFORMS Annual Meeting 2023
- INFORMS Applied Probability Society (APS) 2023
- AsuFest 2023
- Marketplace Innovation Workshop 2023

"When Does Interference Matter? Decision-Making in Platform Experiments."
- MIT Conference on Digital Experimentation (CODE) 2024, presented by Anushka Murthy

"Platform Experimentation and Decision-Making Under Marketplace Interference"
- Columbia Center for AI and Responsible Financial Innovation 2024
- Waymo Data Science Seminar 2024
- INFORMS RMP 2023
- ACM SIGMETRICS Workshop on "Causal Inference for Engineers"
- Airbnb Academic Collaborators Seminar 2023
- Workshop on Mathematical Social Science 2023
- Conference on Artificial Intelligence, Machine Learning, and Business Analytics 2022
- Simons Workshop on Quantifying Uncertainty: Stochastic, Adversarial, and Beyond 2022
- Marketplace Innovation Workshop 2022
- INFORMS Annual Meeting 2021
- Cornell Young Researchers Workshop 2021

"Interference, Bias, and Variance in Marketplace Experimentation"
- MIT Conference on Digital Experimentation (CODE) 2021.

"Experimental Design in Two-Sided Platforms: An Analysis of Bias"
- American Causal Inference Conference 2022
- WINE '21: Spotlights Beyond Wine
- Stanford Causal Science Center
- 2021 Conference on Digital Experimentation (CODE)
- INFORMS MSOM SIG Conference 2021
- Marketplace Innovations Workshop (MIW) 2021
- Vinted Data Science Team
- Stanford Data Science Lab
- INFORMS Annual Meeting 2020
- Lyft Data Science Team
- Kellogg-Wharton Operations Management Workshop
- ACM Conference on Economics and Computation (EC) 2020
- Revenue Management and Pricing Live Paper Series
- 2020 Conference on Digital Experimentation (CODE)
- Facebook Core Data Science Seminar
- Stanford Causal Inference Seminar

"Dropping Standardized Testing for Admissions: Differential Variance and Access"
- INFORMS MSOM Conference 2021

"Exploration vs. Exploitation in Team Formation"
- Informs Annual Meeting 2020.
- Conference on Web and Internet Economics 2018
- INFORMS Annual Meeting 2018
- Upwork Data Science Seminar
- Stanford Social Algorithms Seminar


## OTHER EXPERIENCE

**Writer for College Student Blog**
Student Voices, Pomona College                                    Jan '15 - May '15

**Research Assistant**
UC Berkeley Vision Sciences- Berkeley, CA                         May - Aug '13

**News Writer**
The Student Life, Pomona College                                  Aug '12 - May '13


## OUTSIDE ACTIVITIES

Columbia Business School requires faculty members to disclose any activities that might present a real or apparent conflict of interest. I have no outside activities to report.