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#### EMPLOYMENT Cornell University, NY

2022 - Present

- Assistant Research Professor (Non-tenure track),
- Center for Data Science for Enterprise and Society

#### EDUCATION Carnegie Mellon University, Pittsburgh, PA

2017-2022

- Ph.D. in Algorithms, Combinatorics and Optimization (ACO)
- Home Department: Tepper School of Business
- Thesis: Learning and Earning Under Noise and Uncertainty
- Committee: R. Ravi (Chair), Andrew A. Li, Alan Scheller-Wolf and Sridhar Tayur

#### Stony Brook University, Stony Brook, NY

2014 - 2017

• M.S. in Applied Mathematics and Statistics

#### Tsinghua University, Beijing, China PR

2010-2014

• B.S. in Mathematics

#### AWARDS

- Winner, Dantzig Dissertation Award in Operations Research and Management Science, 2022
- Gerald L. Thompson Doctoral Dissertation Award in Management Science (CMU), 2022
- Winner, INFORMS Pierskalla Best Paper Award in Health Applications, 2021
- Egon Balas Award for Best Operations Research Student Paper (CMU), 2020
- William Larimer Mellon PhD Fellowship (CMU), 2017-2022

#### RESEARCH PAPERS

In reverse chronological order. "\*\*" means the authors are listed alphabetically.

• Mixing Is All You Need: Experimentation Under Non-Markovian, Non-sparse Interference

Su Jia, Nathan Kallus and Christina Lee Yu In preparation

• Experimentation Under Dynamic Spatio-temporal Interference

Su Jia, Peter Frazier, Nathan Kallus and Christina Lee Yu In preparation

• Clustered Switchback Experiments: Near-Optimal Rates Under Spatiotemporal Interference

Su Jia, Nathan Kallus and Christina Lee Yu Under review

• From Stream to Pool: Dynamic Pricing for Customers with Diminishing Marginal Utility

(\*) Titing Cui, Su Jia and Thomas Lavastida Under review, *Operations Research* 

• Multi-Armed Bandit with Interference

Su Jia, Peter Frazier and Nathan Kallus Under Review, Annals of Statistics

#### • Short-Lived High-Volume Bandits

Su Jia, Nishant Oli, Paul Duff, Ian Anderson Andrew Li and R. Ravi Preliminary version appeared in the proceedings of ICML'23 Major revision, *Operations Research* 

#### • Smooth Non-stationary Bandits

Su Jia, Qian Xie, Nathan Kallus and Peter Frazier. Preliminary version appeared in the proceedings of ICML'23 Major/Immediate revision, *Operations Research* 

### • Markdown Pricing for Unknown Parametric Demand Models

Su Jia, Andrew Li and R. Ravi

Preliminary version appeared in the proceedings of NeurIPS'22

Major Revision, Management Science

### • Toward a Liquid Biopsy: Greedy Approximation Algorithms for Active Sequential Hypothesis Testing

 $(\star)$  Kyra Gan, Su Jia, Andrew Li and Sridhar Tayur Winner, 2021 INFORMS Pierskalla Best Paper Award Preliminary version appeared in the proceedings of NeurIPS'21 Minor revision,  $Management\ Science$ 

#### • Effective Online Order Acceptance Policies For Omni-Channel Fulfillment.

(\*) Su Jia, Jeremy Karp, R. Ravi and Sridhar Tayur Published, Manufacturing and Service Operations Management (MSOM), 2022

### • Markdown Pricing Under Unknown Demand

(\*) Ningyuan Chen, Su Jia, Andrew Li and R. Ravi Egon Balas Award for Best CMU Student Paper in Operations Research, 2020 Preliminary version appeared in the proceedings of NeurIPS'21 Under Review, *Mathematics of Operations Research* 

#### • Optimal Decision Tree and Submodular Ranking with Noisy Outcomes

Su Jia, Fatemeh Navidi, Viswanath Nagarajan and R. Ravi Preliminary version appeared in the proceedings of NeurIPS'19 Accepted, *Journal of Machine Learning Research*, 2024

# • Competitive Analysis for Online Scheduling in Software-Defined Optical WAN Su Jia, Xin Jin, Golnaz Ghasemiesfeh, Jiaxin Ding and Jie Gao IEEE International Conference on Computer Communications 2017 (INFOCOM'17)

#### • Network Optimization on Partitioned Pairs of Points.

Esther Arkin, Aritra Banik, Paz Carmi, Gui Citovsky, Su Jia, Matthew Katz, Tyler Mayer and Joseph S.B. Mitchell

The 28th International Symposium on Algorithms and Computation (ISAAC'17)

#### • Exact and Approximation Algorithms for Time-Window TSP

Su Jia, Jie Gao, Joseph S.B. Mitchell and Lu Zhao International Workshop on the Algorithmic Foundations of Robotics 2016 (WAFR'16)

TEACHING

• MBA Mathematical Preparation (Session 3), Instructor	June - July 2020
Rating: 4.83 (respondents 6/23)	

### • MBA Mathematical Preparation (Session 4), Instructor Rating: 4.31 (respondents 13/22)

## • MBA Mathematical Preparation (Session 3), Instructor Rating: 4.75 (respondents 23/45) June - July 2021

# • MBA Mathematical Preparation (Session 4), Instructor Rating: 4.89 (respondents 9/28) July - Aug 2021

#### • As Teaching Assistant

As Teaching Assistant	
o Operations Management (MBA Core),	Oct - Dec 2021
with Prof. Sridhar Tayur	
• Business Value Through Integrative Analytics (MSBA),	June - Aug 2020
with Prof. R. Ravi	

• Financial Optimization (MSCF),	Aug - Oct 2020
with Prof. Javier Peña	
• Optimization in Finance (MBA elective),	Jan - Mar 2020
with Prof. Gérard Cornuéjols	
$\circ$ Financial Optimization (MSCF),	Aug - Oct 2019
with Prof. Javier Peña	
<ul> <li>Business Value Through Integrative Analytics (MSBA),</li> </ul>	June - Aug 2019
with Prof. R. Ravi	
o Optimization (MBA Core),	Aug - Oct 2019
with Prof. Fatma Kılınç-Karzan	
<ul> <li>Applications of Operations Research (MBA elective),</li> </ul>	Jan - Mar 2019
with Prof. Andrew A. Li	
<ul> <li>Applications of Operations Research (MBA elective),</li> </ul>	Aug - Oct 2018
with Prof. Andrew A. Li	
o Computational Geometry	Jan - May 2016
with Prof. Joseph S. B. Mitchell	
o Network Flows	Sep - Dec $2015$
with Prof. Esther Arkin	
o Combinatorics	Jan - May 2015
with Prof. Xinyun Chen	
o Combinatorics	Sep - Dec 2014
with Prof. Alan Tucker	