**Su Jia** **Last update: Oct 31, 2022**

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EMPLOYMENT

**Cornell University,** Ithaca, NY 2022 - Present

- Assistant Research Professor, 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

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

SELECTED WORK

- **(Working Paper) Short-Lived High-Volume Bandits: Algorithms and Field Experiment.**
  Su Jia, Nishant Oli, Andrew Li, R. Ravi, Paul Duff and Ian Anderson.
- **Dyanmic Pricing with Monotonicity Constraint Under Unknown Parametric Demand Model.**
  Su Jia, Andrew Li and R. Ravi
  Accepted to NeurIPS'22
- **Toward a Liquid Biopsy: Greedy Approximation Algorithms for Active Sequential Hypothesis Testing.**
  Kyra Gan*, Su Jia*, Andrew Li and Sridhar Tayur
  Winner, 2021 INFORMS Pierskalla Best Paper Award
  Submitted to *Management Science*
  Preliminary version appeared in the proceedings of NeurIPS'21
- **Effective Online Order Acceptance Policies For Omni-Channel Fulfillment.**
  Su Jia, Jeremy Karp, R. Ravi and Sridhar Tayur
  *Manufacturing and Service Operations Management* (MSOM), 2022
- **Conservative Price Experimentation: Markdown Pricing Under Unknown Demand.**
  Su Jia, Andrew Li and R. Ravi
  Egon Balas Award for Best CMU Student Paper in Operations Research, 2020
  Major Revision, *Management Science*
- **Optimal Decision Tree and Submodular Ranking with Noisy Outcomes.**
  Su Jia, Fatemeh Navidi, Viswanath Nagarajan and R. Ravi
  Submitted to *Journal of Machine Learning Research*
  Preliminary version appeared in the proceedings of NeurIPS'19

## Refereed Conference Proceedings

- **Greedy Approximation Algorithms for Active Sequential Hypothesis Testing.**
  Kyra Gan*, Su Jia* and Andrew Li
  Thirty-fifth Conference on Neural Information Processing Systems (NeurIPS'21)
- **Optimal Decision Tree with Noisy Outcomes.**
  Su Jia, Fatemeh Navidi, Viswanath Nagarajan and R. Ravi
  Thirty-third Conference on Neural Information Processing Systems (NeurIPS'19)
- **Deep Manifold Learning of Symmetric Positive Definite Matrices with Application to Face Recognition.**
  Zhen Dong, Su Jia, Chi Zhang, Tianfu Wu and Mingtao Pei
  Thirty-First AAAI Conference on Artificial Intelligence (AAAI'17)
- **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 and Prize Collecting Problem.**
  Su Jia, Jie Gao, Joseph S. B. Mitchell and Lu Zhao
  International Workshop on the Algorithmic Foundations of Robotics 2016 (WAFR'16)
- **Face Video Retrieval via Deep Learning of Binary Hash Representations.**
  Zhen Dong, Su Jia, Tianfu Wu and Mingtao Pei.
  Thirtieth AAAI Conference on Artificial Intelligence (AAAI'16)

## Teaching

- **MBA Mathematical Preparation (Session 3), Instructor** — June - July 2020
  Rating: 4.83 (respondents 6/23)
- **MBA Mathematical Preparation (Session 4), Instructor** — July - Aug 2020
  Rating: 4.31 (respondents 13/22)
- **MBA Mathematical Preparation (Session 3), Instructor** — June - July 2021
  Rating: 4.75 (respondents 23/45)
- **MBA Mathematical Preparation (Session 4), Instructor** — July - Aug 2021
  Rating: 4.89 (respondents 9/28)
- **As Teaching Assistant at CMU**
  - **Operations Management** (MBA Core), with Prof. Sridhar Tayur — Oct - Dec 2021
  - **Business Value Through Integrative Analytics** (MSBA), with Prof. R. Ravi — June - Aug 2020
  - **Financial Optimization** (MSCF), with Prof. Javier Peña — Aug - Oct 2020
  - **Optimization in Finance** (MBA), with Prof. Gérard Cornuéjols — Jan - Mar 2020
  - **Financial Optimization** (MSCF), with Prof. Javier Peña — Aug - Oct 2019
  - **Business Value Through Integrative Analytics** (MSBA), with Prof. R. Ravi — June - Aug 2019
  - **Optimization** (MBA Core), with Prof. Fatma Kılınç-Karzan — Aug - Oct 2019
  - **Applications of Operations Research** (MBA), with Prof. Andrew A. Li — Jan - Mar 2019
  - **Applications of Operations Research** (MBA), with Prof. Andrew A. Li — Aug - Oct 2018
- **As Teaching Assistant at Stony Brook University**

- **Computational Geometry**
  with Prof. Joseph S. B. Mitchell
- **Network Flows**
  with Prof. Esther Arkin
- **Combinatorics**
  with Prof. Xinyun Chen
- **Combinatorics**
  with Prof. Alan Tucker