

Jieming Mao

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RESEARCH INTERESTS

I am generally interested in theoretical computer science. More specifically, I am interested in multi-armed bandit, algorithmic game theory, communication complexity and information theory.

EDUCATION

Princeton University, Princeton, NJ, United States

Phd in Computer Science, expected 06/2018

Advisor: Mark Braverman

09/2013-Present

Overall GPA: 4.0/4.0

Tsinghua University, Beijing, China

Bachelor of Engineering in Computer Science, Yao Class

08/2009-06/2013

Overall GPA: 93.4/100

INTERNSHIP

Microsoft Research New England Lab, Cambridge, MA, United States

Mentor: Nicole Immorlica

05/2017-08/2017

PUBLICATIONS AND WORKING PAPERS

1. **Combinatorial Assortment Optimization.**
with Nicole Immorlica, Brendan Lucier, Vasilis Syrgkanis, Chistos Tzamos
In Submission
2. **Selling to a No-Regret Buyer.**
with Mark Braverman, Jon Schneider, Matt Weinberg
In Submission
3. **Multi-armed Bandit Problems with Strategic Arms.**
with Mark Braverman, Jon Schneider, Matt Weinberg
In Submission
4. **On Simultaneous Two-player Combinatorial Auctions.**
with Mark Braverman, Matt Weinberg
SODA 2018
5. **A Nearly Instance Optimal Algorithm for Top-k Ranking under the Multinomial Logit Model.**
with Xi Chen, Yuanzhi Li
SODA 2018
6. **Competitive Analysis of the Top-K Ranking Problem.**
with Xi Chen, Sivakanth Gopi, Jon Schneider
SODA 2017
7. **Parallel Algorithms for Select and Partition with Noisy Comparisons.**
with Mark Braverman, Matt Weinberg
STOC 2016
8. **Coding for Interactive Communication Correcting Insertions and Deletions.**
with Mark Braverman, Ran Gelles, Rafail Ostrovsky

ICALP 2016

IEEE Trans. On Information Theory, 63(10), pages 6256-6270, 2017

9. **Interpolating between Truthful and Non-truthful Mechanisms for Combinatorial Auctions.**

with Mark Braverman, Matt Weinberg

SODA 2016

10. **Near-optimal Bounds on Bounded-round Quantum Communication Complexity of Disjointness.**

with Mark Braverman, Ankit Garg, Young Kun Ko, Dave Touchette

FOCS 2015, QIP 2016

SIAM Journal on Computing

11. **Simulating Noisy Channel Interaction.**

with Mark Braverman

ITCS 2015:21-30

12. **Tighter Relations between Sensitivity and Other Complexity Measures.**

with Andris Ambainis, Mohammad Bavarian, Yihan Gao, Xiaoming Sun,

Song Zuo

ICALP(1)2014:101-113

13. **On the Sensitivity Complexity of Bipartite Graph Properties.**

with Yihan Gao, Xiaoming Sun, Song Zuo

Theor. Comput. Sci. 468:83-91(2013)

TALKS

Simulating Noisy Channel Interaction.

- ITCS 2015, Israel

Parallel Algorithms for Select and Partition with Noisy Comparisons.

- STOC 2016, Boston

Coding for Interactive Communication Correcting Insertions and Deletions.

- ICALP 2016, Italy

On Simultaneous Two-player Combinatorial Auctions.

- Young Researcher Workshop on Economics and Computation, 01/ 2017, Israel
- Algorithm Seminar, Google Research New York, 04/2017, New York

Identifying the Top-k Items with Noisy Comparisons.

- China Theory Week, 07/ 2017, China

AWARDS AND HONORS

Siebel Scholarship, 2017-2018

School of Engineering and Applied Science Award for Excellence, 2016

12th place in ACM/ICPC World Final, 07/2013

Gold Medal in International Olympiad in Informatics, 06/2009

Silver Medal in Chinese Mathematical Olympiad, 12/2008

TEACHING

COS 340 Reasoning about Computation TA, 2015 Spring

COS 451 Computational Geometry TA, 2015 Fall

COS 445 Economics and Computing TA, 2017 Spring

COS 340 Reasoning about Computation TA, 2017 Fall