Ruiquan Gao

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Education

Doctor of Philosophy in Computer Science

September 2022 - Present

Advised by Aviad Rubinstein and Moses Charikar, Stanford University

Bachelor of Engineering in Computer Science

August 2018 - June 2022

Yao Class, Institute for Interdisciplinary Information Sciences Tsinghua University, GPA: 3.95/4.00 (Rank 5/54)

Publications

- 1. **Ruiquan Gao**, Mohammad Roghani, Aviad Rubinstein, Amin Saberi, *Hardness of Approximate Sperner and Applications to Envy-Free Cake Cutting*. In Proceedings of the 65th IEEE Symposium on Foundations of Computer Science, FOCS 2024
- 2. Nima Anari, **Ruiquan Gao**, Aviad Rubinstein, *Parallel Sampling via Counting*. In Proceedings of the 56th Annual ACM Symposium on Theory of Computing, STOC 2024
- 3. Moses Charikar, Ruiquan Gao, Improved Approximations for Ultrametric Violation Distance. In Proceedings of the 2024 ACM-SIAM Symposium on Discrete Algorithms, SODA 2024
- 4. Eric Budish, **Ruiquan Gao**, Abraham Othman, Aviad Rubinstein, Qianfan Zhang, *Practical algorithms and experimentally validated incentives for equilibrium-based fair division (A-CEEI)*. In Proceedings of the 24th ACM Conference on Economics and Computation, EC 2023
- 5. Ruiquan Gao, Zhongtian He, Zhiyi Huang, Zipei Nie, Bijun Yuan, Yan Zhong, *Improved Online Correlated Selection*. In Proceedings of the 62nd IEEE Annual Symposium on Foundations of Computer Science, FOCS 2021

Talks

Hardness of Approximate Sperner and Applications to Envy-Free Cake Cutting

FOCS 2024 October 2024 CS Peer Talk (Peking University) September 2024

Parallel Sampling via Counting

STOC 2024 June 2024 Stanford Theory Lunch June 2024

Improved Approximations for Ultrametric Violation Distance

SODA 2024 January 2024

Improved Online Correlated Selection

Yao Class Seminar (Tsinghua University)

November 2021

Honors and Awards

Stanford Graduate Fellowship March 2022

Rambus Corporation Fellow

Yao Award September 2021

Bronze Medal

Scholarship for Comprehensive Outstanding, Tsinghua

October 2020

Scholarship for Academic Excellence, Tsinghua

October 2019 & 2021

ACM-ICPC Asia Regional Contest (Xuzhou)

Gold Medal (champion)

October 2018

National Olympiad in Informatics

Gold Medal

July 2016 & 2017

Other Research Experience

Stanford University

(Remote) visiting student advised by Aviad Rubinstein

Spring 2021

Project: Approximate Competitive Equilibrium from Equal Incomes

The University of Hong Kong

(Remote) research intern advised by Zhiyi Huang

Summer 2020

Project: Online Correlated Selection

Services

Conference Subreviewing: SODA 2022, STOC 2024, ICALP 2024, SODA 2025, ITCS 2025