Ruiquan Gao

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Education

Doctor of Philosophy in Computer Science Advised by Aviad Rubinstein and Moses Charikar,

Stanford University

Bachelor of Engineering in Computer Science 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 (to appear)
- 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	
CS Peer Talk (Peking University)	September 2024
Parallel Sampling via Counting STOC 2024 Stanford Theory Lunch	June 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
Yao Award Bronze Medal	September 2021
Scholarship for Comprehensive Outstanding, Tsinghua	October 2020
Scholarship for Academic Excellence, Tsinghua	October 2019 & 2021

September 2022 - Present

August 2018 - June 2022

ACM-ICPC Asia Regional Contest (Xuzhou)

Gold Medal (champion)

National Olympiad in Informatics

 $Gold\ Medal$

Other Research Experience

Stanford University

(Remote) visiting student advised by Aviad Rubinstein Project: Approximate Competitive Equilibrium from Equal Incomes

The University of Hong Kong

(Remote) research intern advised by Zhiyi Huang Project: Online Correlated Selection

Services

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

July 2016 & 2017

Spring 2021

Summer 2020