

# Ruiquan Gao

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## Education

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### 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

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**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)

Nima Anari, **Ruiquan Gao**, Aviad Rubinstein, *Parallel Sampling via Counting*. In Proceedings of the 56th Annual ACM Symposium on Theory of Computing, STOC 2024

Moses Charikar, **Ruiquan Gao**, *Improved Approximations for Ultrametric Violation Distance*. In Proceedings of the 2024 ACM-SIAM Symposium on Discrete Algorithms, SODA 2024

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

**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

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### 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

November 2021

## Honors and Awards

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### Stanford Graduate Fellowship

March 2022

### 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)

October 2018

Gold Medal (champion)

## Other Research Experience

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### 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

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Conference Subreviewing: SODA 2022, STOC 2024, ICALP 2024