# Renfei Zhou

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## **EDUCATION**

#### Tsinghua University, Beijing, China

2020-Present

B.Eng. in Computer Science, Yao Class, Institute for Interdisciplinary Information Sciences

- GPA: 3.98/4.0
- Ranked 3rd out of 76 students in Yao Class
- Related courses: Math for CS (A), Algorithm Design (A+), Theory of Computation (A+)
- Expected graduation: 2024-07.

## SELECTED PUBLICATIONS

Authors are in alphabetical order.

### Dynamic Dictionary with Subconstant Wasted Bits per Key

Tianxiao Li, Jingxun Liang, Huacheng Yu, Renfei Zhou. In Proc. SODA, 2024.

#### New Bounds for Matrix Multiplication: from Alpha to Omega

Virginia Vassilevska Williams, Yinzhan Xu, Zixuan Xu, Renfei Zhou. In Proc. SODA, 2024.

#### Faster Matrix Multiplication via Asymmetric Hashing

Ran Duan, Hongxun Wu, Renfei Zhou. In Proc. FOCS, 2023.

### Dynamic "Succincter"

Tianxiao Li, Jingxun Liang, Huacheng Yu, Renfei Zhou. In Proc. FOCS, 2023.

#### Tight Cell-Probe Lower Bounds for Dynamic Succinct Dictionaries

Tianxiao Li, Jingxun Liang, Huacheng Yu, Renfei Zhou. In Proc. FOCS, 2023.

Covered in Quanta Magazine.

## OTHER PUBLICATIONS

Authors are in alphabetical order.

#### Bidder Selection Problem in Position Auctions via Poisson Approximation

Nick Gravin, Yixuan Even Xu, Renfei Zhou. To appear in Proc. ACM Web Conference (WWW), 2024.

#### Listing 6-Cycles

Ce Jin, Virginia Vassilevska Williams, Renfei Zhou. In Proc. SOSA, 2024.

#### On the Perturbation Function of Ranking and Balance for Weighted Online Bipartite Matching

Jingxun Liang, Zhihao Gavin Tang, Yixuan Even Xu, Yuhao Zhang, Renfei Zhou. In Proc. ESA, 2023.

## SELECTED AWARDS AND SCHOLARSHIPS

# • China National Scholarship Awarded to 4–5 students in Yao Class each year

2023

#### • Yao Award (Silver Medal)

Awarded to 3 students in Yao Class each year

2023

• Excellent Comprehensive Scholarship of Tsinghua University

2021 and 2022

• China Collegiate Programming Contest Finals Gold award, 3rd place (with teammates Yixuan Even Xu and Binwei Yan)	2021
• ACM International Collegiate Programming Contest, Asia Regional Contest, Jinan S Gold medal, 1st place (with teammates Binwei Yan and Zheyu Zhang)	ite 2020
• International Olympiad in Informatics China Team Selection 5th place	2020
• China National Olympiad in Informatics Gold medal, 11th place	2019
Service	
• Yao Class Research Seminar Co-organizer; invited speaker	2023-2024
• Yao Class Course-Review Seminar Co-organizer; main speaker for multiple courses	2020-2023
• Theory of Computation (Tsinghua University) Teaching assistant (Instructor: Ran Duan)	Spring 2022
• Conference reviewing: SODA	
Research Visits and Internships	
• Massachusetts Institute of Technology Visiting student advised by Virginia Vassilevska Williams	Spring 2023
• Huawei TCS Lab, Shanghai, China Summer research internship, advised by Zhihao Gavin Tang	Summer 2021
• Megvii Technology, Beijing, China Winter research internship	Winter 2020