

# Renfei Zhou

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## EDUCATION

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### 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

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*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.

## OTHER PUBLICATIONS

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*Authors are in alphabetical order.*

### Listing 6-Cycles

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

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

Nick Gravin, Yixuan Even Xu, **Renfei Zhou**. Preprint arXiv:2306.10648, 2023.

### 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

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- |   |               |
|---|---------------|
| • <b>China National Scholarship</b>                                 | 2023          |
| Awarded to 4–5 students in Yao Class each year                      |               |
| • <b>Yao Award (Silver Medal)</b>                                   | 2023          |
| Awarded to 3 students in Yao Class each year                        |               |
| • <b>Excellent Comprehensive Scholarship of Tsinghua University</b> | 2021 and 2022 |

- **China Collegiate Programming Contest Finals** 2021  
Gold award, 3rd place (with teammates Yixuan Even Xu and Binwei Yan)
- **ACM International Collegiate Programming Contest, Asia Regional Contest, Jinan Site** 2020  
Gold medal, 1st place (with teammates Binwei Yan and Zheyu Zhang)
- **International Olympiad in Informatics China Team Selection** 2020  
5th place
- **China National Olympiad in Informatics** 2019  
Gold medal, 11th place

## SERVICE

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- **Yao Class Research Seminar** 2023–2024  
Co-organizer; invited speaker
- **Yao Class Course-Review Seminar** 2020–2023  
Co-organizer; main speaker for multiple courses
- **Theory of Computation (Tsinghua University)** Spring 2022  
Teaching assistant (Instructor: Ran Duan)
- Conference reviewing: SODA

## RESEARCH VISITS AND INTERNSHIPS

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- **Massachusetts Institute of Technology** Spring 2023  
Visiting student advised by Virginia Vassilevska Williams
- **Huawei TCS Lab, Shanghai, China** Summer 2021  
Summer research internship, advised by Zhihao Gavin Tang
- **Megvii Technology, Beijing, China** Winter 2020  
Winter research internship