

Renfei Zhou

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Last Update: April 30, 2024

EDUCATION

Tsinghua University, Beijing, China

2020–Present

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

- 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.

Covered in [Quanta Magazine](#).

Faster Matrix Multiplication via Asymmetric Hashing

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

Covered in [Quanta Magazine](#).

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: A Fast and Simple Algorithm via Poisson Approximation

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

Listing 6-Cycles

Ce Jin, Virginia Vassilevska Williams, **Renfei Zhou**. In *Proc. SODA*, 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** 2023
Awarded to 4–5 students in Yao Class each year
- **Yao Award (Silver Medal)** 2023
Awarded to 3 students in Yao Class each year
- **Excellent Comprehensive Scholarship of Tsinghua University** 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

- Conference reviewing: SODA 2024, FOCS 2024, ICALP 2024
- **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)

RESEARCH VISITS AND INTERNSHIPS

- **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