

# Renfei Zhou

Tsinghua University, Zijing No. 2 Apartment 106A, Beijing, China 100084  
orbitingflea@gmail.com    <https://orbitingflea.github.io>  
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