

# HONGXUN WU

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whxwhx.github.io

## EDUCATION

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B.Eng., **Tsinghua University**

August 2018 - Present

- Yao Class, Institute for Interdisciplinary Information Sciences
- *Overall GPA: 3.92 (Rank 2/54)*

## VISITING

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**Massachusetts Institute of Technology**

Spring 2021

Visiting student (online) advised by Ryan Williams

**ITCS, Shanghai University of Finance and Economics**

Summer 2020 & 2021

Visiting student advised by Zhihao Gavin Tang, Hu Fu, Pinyan Lu

**BARC, University of Copenhagen**

Summer 2019

Visiting student advised by Mikkel Thorup

## AWARDS AND SCHOLARSHIPS

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**Yao Award**

October 2021

*Gold Medal (Awarded to one Yao Class student each year)*

**Scholarship for Comprehensive Outstanding, Tsinghua**

October 2020 & 2021

**Scholarship for Academic Excellence, Tsinghua**

September 2019

**The ACM-ICPC Asia Regional Contest, Nanjing Site**

October 2018

*Gold Medal, 2nd place*

**National Olympics in Informatics**

July 2017

*Gold Medal, 5th place*

## PUBLICATIONS

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*(In theoretical computer science, the authors are listed in alphabetical order.)*

Zhihao Gavin Tang, Hongxun Wu, and Jinzhao Wu. **(Fractional) Online Stochastic Matching via Fine-Grained Offline Statistics**. In *54th Annual ACM Symposium on Theory of Computing, STOC 2022*

Lijie Chen, Ce Jin, R. Ryan Williams, and Hongxun Wu. **Truly Low-Space Element Distinctness and Subset Sum via Pseudorandom Hash Functions**. In *Proceedings of the 33rd Annual ACM-SIAM Symposium on Discrete Algorithms, SODA 2022*

Hu Fu, Pinyan Lu, Zhihao Gavin Tang, Abner Turkieltaub, Hongxun Wu, Jinzhao Wu, and Qianfan Zhang. **Oblivious Online Contention Resolution Schemes**. In *5th Symposium on Simplicity in Algorithms (In Press), SOSA 2022*

Hu Fu, Zhihao Gavin Tang, Hongxun Wu, Jinzhao Wu, and Qianfan Zhang. **Random Order Vertex Arrival Contention Resolution Schemes for Matching, with Applications**. In *48th International Colloquium on Automata, Languages, and Programming, ICALP 2021*

Kyriakos Axiotis, Arturs Backurs, Karl Bringmann, Ce Jin, Vasileios Nakos, Christos Tzamos, and Hongxun Wu. **Fast and Simple Modular Subset Sum**. In *4th Symposium on Simplicity in Algorithms, SOSA 2021*

Hongxun Wu. **Near-Optimal Algorithm for Constructing Greedy Consensus Tree**. In *47th International Colloquium on Automata, Languages, and Programming, ICALP 2020*

Ran Duan, Ce Jin, and Hongxun Wu. **Faster Algorithms for All Pairs Non-Decreasing Paths Problem**. In *46th International Colloquium on Automata, Languages, and Programming, ICALP 2019*

Kyriakos Axiotis, Arturs Backurs, Ce Jin, Christos Tzamos, and Hongxun Wu. **Fast Modular Subset Sum using Linear Sketching**. In *Proceedings of the Thirtieth Annual ACM-SIAM Symposium on Discrete Algorithms, SODA 2019*

Ce Jin and Hongxun Wu. **A Simple Near-Linear Pseudopolynomial Time Randomized Algorithm for Subset Sum**. In *2nd Symposium on Simplicity in Algorithms, SOSA 2019*

## TALKS

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**Truly Low-Space Element Distinctness and Subset Sum via Pseudorandom Hash Functions**  
SODA 2022 January 2022  
Yao Class Seminar November 2021

**Random Order Vertex Arrival Contention Resolution Schemes for Matching**  
ICALP 2021 July 2021

**Oblivious Online Contention Resolution Schemes**  
Yao Class Seminar October 2020

**Near-optimal Algorithm for Greedy Consensus Tree**  
ICALP 2020 July 2020

**Faster Algorithms for All-Pair Nondecreasing Path**  
ICALP 2019 July 2019  
TCS Youth Forum (ICT, Chinese Academy of Sciences) October 2019

## TEACHING EXPERIENCES

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**Teaching Assistant, Tsinghua** Fall 2021  
Algorithm Design (Instructor: Jian Li)

## SERVICES

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Conference Reviewing: SODA 2021

## LANGUAGES & SKILLS

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English (fluent): TOEFL 110 (Speaking 23)

Chinese (native)

Programming,  $\text{\LaTeX}$