

# 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

## SELECTED 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
- **National Olympics in Informatics** July 2017  
*Gold Medal, 5th place*

## PUBLICATIONS

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- 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 (In Press), 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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- **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 EXPERIENCE

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

## SERVICE

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Conference Reviewing: SODA 2021

## LANGUAGE SKILLS

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- English (fluent): TOEFL 110 (Speaking 23), GRE 323 + 4.0 (Verbal 157)
- Chinese (native)