HONGXUN WU

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whxwhx.github.io

EDUCATION

B.Eng., **Tsinghua University** August 2018 - Present

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

VISITING

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

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

(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

Element Distinctness, Birthday Paradox, and 1-out Pseudorandom Graphs
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

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

SERVICES

Conference Reviewing: SODA 2021

LANGUAGES & SKILLS

English (fluent): TOEFL 110 (Speaking 23)

Chinese (native)

Programming, LaTeX