# HONGXUN WU

wuhx18@mails.tsinghua.edu.cn

`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

## SELECTED 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

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

## PUBLICATIONS

- 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

- **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

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

## SERVICE

Conference Reviewing: SODA 2021

## LANGUAGE SKILLS

- English (fluent): TOEFL 110 (Speaking 23)

- Chinese (native)