

Mingxun Zhou

wuwuz.github.io

Email : mingxunz@andrew.cmu.edu

Interests: Privacy-preserving Technology, Cryptography, Blockchain

EDUCATION

Carnegie Mellon University

Pittsburgh, US

- *Ph.D. in Computer Science*

Feb. 2021 - Present

Peking University

Beijing, China

- *Bachelor of Science (Honored) in Computer Science*

Sep. 2016 - Jul. 2020

- **Turing Class:** First honor class

WORKING EXPERIENCE

NTT Research Cryptography and Information Security Lab

USA

- *Research Intern, Oblivious Algorithm Design*

Jun. 2022 - Aug. 2022

University of Hong Kong

Hong Kong SAR, China

- *Research Assistant, Privacy-preserving Data Aggregation*

Jun. 2021 - Aug. 2021

Shanghai Qizhi Institute

Shanghai, China

- *Research Assistant, High Performance Blockchain Network Research*

Aug. 2020 - Feb. 2021

PUBLICATIONS

- **Mingxun Zhou**, Elaine Shi, T-H. Hubert Chan, & Shir Maimon (Random Ordered). *A Theory of Composition for Differential Obliviousness*. EUROCRYPT, 2023.
- **Mingxun Zhou**, Wei-Kai Lin, Yiannis Tselekounis, & Elaine Shi (Random Ordered). *Optimal Single-Server Private Information Retrieval*. EUROCRYPT, 2023.
- **Mingxun Zhou***, Liyi Zeng*, Yilin Han, Peilun Li, Fan Long, Dong Zhou, Ivan Beschastnikh, & Ming Wu. *Mercury: Fast Transaction Broadcast in High Performance Blockchain System*. IEEE INFOCOM, 2023.
- *Equal contribution.
- **Mingxun Zhou**, Tianhao Wang, T-H. Hubert Chan, Giulia Fanti, & Elaine Shi. *Locally Differentially Private Sparse Vector Aggregation*. IEEE S&P, 2022.
- Charlie Hou*, **Mingxun Zhou***, Yan Ji., Phil Daian, Florian Tramer, Giulia Fanti, & Ari Juels. *SquirRL: Automating Attack Analysis on Blockchain Incentive Mechanisms with Deep Reinforcement Learning*. NDSS, 2021.
- *Equal contribution.
- Minmei Wang*, **Mingxun Zhou***, Shouqian Shi, & Chen Qian. *Vacuum Filters : More Space-Efficient and Faster Replacement for Bloom and Cuckoo Filters*. VLDB, 2020.
- *Equal contribution.

PREPRINTS AND OTHER RESEARCH PROJECTS

- **Mingxun Zhou**, & Elaine Shi. *The Power of the Differentially Oblivious Shuffle in Distributed Privacy Mechanisms*. 2022.

COMPETITIONS

International Collegiate Programming Contest, Regional Gold Medal, *ICPC Foundation*

Oct. 2018

National Olympiad of Informatics, Gold Medal, *China Computer Federation*

Aug. 2015

AWARDS AND HONORS

Outstanding Dissertation for Bachelor's Degree (Top 10 in the EECS school), <i>PKU</i>	Jun. 2020
Turing Benteng Scholarship, <i>PKU</i>	Nov. 2019
Kwang-Hua Scholarship (Top 3 in class, ~1% of students), <i>PKU</i>	Dec. 2018
Chuang-Long Ke Scholarship, <i>PKU</i>	Dec. 2017
Dean Scholarship for Freshman, <i>PKU</i>	Sep. 2016

CODING

- **Primary Languages:** C, C++, Python
- **Others:** Go, Rust