Zishuo ZHAO

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ISE, University of Illinois Urbana-Champaign

1 Background

- **2021/01 - now** PhD student, Department of Industrial & Enterprise Systems Engineering, University of Illinois Urbana-Champaign
  Research Area: Operations Research

- **2020/08 - 2021/01** Research Assistant, Haihua Institute for Frontier Information Technology

- **2016/05 - 2020/07** Undergraduate student, Yao Class, Institute for Interdisciplinary Information Sciences, Tsinghua University

- **2015/08 - 2016/05** Undergraduate student, Department of Computer Science and Technology, Tsinghua University

- **2012/09 - 2015/06** No.1 Middle School Affiliated to Central China Normal University

2 Research Interests

I am a third-year PhD student in UIUC, majoring in operations research, and currently doing research in blockchain mechanism design. My research interests also span a wide scope including scheduling, pricing, fair division, algorithm design, mechanism design and game theory. I have an affection for adopting the ideas and tools in theoretical computer science into applications of modern research topics including optimization and mechanism design.

Beside my major, I have an amateur interest in computational geometry and topology, which was my research interest during undergraduate time. I have always been excited to solve or prove research problems with geometric and topological inspirations.

I also have an interest in Capture-The-Flag(CTF) competitions, especially in Crypto and Reverse.

3 Research

Bayesian-Nash-Incentive-Compatible Mechanism for Blockchain Transaction Fee Allocation
Zishuo Zhao, Xi Chen, Yuan Zhou
Accepted for CESC 2022.
Dynamic Car Dispatching and Pricing: Revenue and Fairness for Ridesharing Platforms
Zishuo Zhao, Xi Chen, Xuefeng Zhang, Yuan Zhou
Accepted for IJCAI 2022, Long Oral (3.75%). [Link]
ClusterSLAM: A SLAM Backend for Simultaneous Rigid Body Clustering and Motion Estimation

Jiahui Huang, Sheng Yang, Zishuo Zhao, Yukun Lai, Shi-Min Hu.
Accepted for ICCV 2019. [Link]

4 Talks

Bayesian-Nash-Incentive-Compatible Mechanism for Blockchain Transaction Fee Allocation
Zishuo Zhao, Xi Chen, Yuan Zhou
Invited to INFORMS Annual Meeting 2022.
Dynamic Car Dispatching and Pricing: Revenue and Fairness for Ridesharing Platforms
Zishuo Zhao, Xi Chen, Xuefeng Zhang, Yuan Zhou
Invited to INFORMS Annual Meeting 2021.

5 Academic Activities

- Facilitator in section Revenue & Pricing, INFORMS Annual Meeting 2021

- Challenge developer of TQLCTF 2022

6 Awards

- 12th place in 2nd THUCTF Information Security Contest in Tsinghua University, 2020

- 12th place in 24th Artificial Intelligence Programming Contest in Tsinghua University, 2020

- Baidu Scholarship for Arts Excellence, 2018

- Xuetang Scholarship, 2016-2020

- 15th place in 20th Artificial Intelligence Programming Contest in Tsinghua University.

- Second Prize in Chinese Mathematical Olympiad(CMO), 2014

- First Prize in National Olympiad in Informatics in Provinces(NOIP), 2013

7 Coding Skills

- Mainly using C++ and MATLAB, also with command of Python, Java, PHP.

- With some knowledge in Verilog HDL and assembly language.

- Open to learn new programming languages when in need.

(Updated on Sept 11, 2022)