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
- \bullet 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

3.1 Publications

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]

3.2 Working Papers

Bayesian-Nash-Incentive-Compatible Mechanism for Blockchain Transaction Fee Allocation Zishuo Zhao, Xi Chen, Yuan Zhou

4 Talks

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 Aug 15, 2022)