Weihao Zhu

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EDUCATION

University of Illinois Urbana-Champaign

Ph.D. of Computer Science *Aug. 2023 - Present*

- Advised by Chandra Chekuri & Karthekeyan Chandrasekaran

Shanghai Jiao Tong University

Bachelor of Computer Science *Sept. 2019 - June 2023*

- Member of ACM Honors Class, which is an elite CS program for top 5% talented students
- GPA: 90.24/100, Ranking: 2/29

RESEARCH INTERESTS

- Approximating Algorithms
- Graph Algorithms
- Combinatorial Optimization
- Submodular Optimization

EXPERIENCE

Shanghai University of Finance and Economics

Undergraduate Researcher at ITCS, advised by Bundit Laekhanukit *Aug. 2021 - June 2022*

Max Planck Institute for Informatics

Remote Undergraduate Researcher, co-advised by Danupon Nanongkai & Joachim Spoerhase *July 2022 - Dec. 2022*

PUBLICATIONS

Online Disjoint Spanning Trees and Polymatroid Bases
joint work with Karthekeyan Chandrasekaran, Chandra Chekuri *ICALP 2025*

On the Generalized Mean Densest Subgraph Problem: Complexity and Algorithms
joint work with Karthekeyan Chandrasekaran, Chandra Chekuri, Manuel R. Torres *APPROX 2024*

From Directed Steiner Tree to Polymatroid Steiner Tree in Planar Graphs
joint work with Chandra Chekuri, Rhea Jain, Shubhang Kulkarni, Da Wei Zheng *ESA 2024*

Randomized Algorithm for MPMD on Two Sources
joint work with Kun He, Sizhe Li, Enze Sun, Yuyi Wang, Roger Wattenhofer *WINE 2023*

Time-Space Tradeoffs for Element Distinctness and Set Intersection via Pseudorandomness
joint work with Xin Lyu *SODA 2023*

HONORS & AWARDS

Scholarship

- 2020 National Scholarship of P.R. China (Top 0.2% nationwide)
- 2020 Tang Lixin Scholarship (60 winners each year in SJTU)
- 2020 Zhiyuan Honorary Scholarship

Competitions

- Gold Medal, The 2020 ICPC Asia-East Continent Final Contest
- Second Runner up, The 2020 CCPC Qinhuangdao Programming Contest
- Second Runner up, The 2019 ICPC Asia Bangkok Programming Contest
- Silver Medal, The 35th China National Olympiad in Informatics (NOI 2018)
- First Prize, The 2018 National High School Mathematics League (Shanghai Regional)

Other Experience

Teaching Assistant
- CS 473: Algorithms (2025 Fall, UIUC)
- CS 374: Introduction to Algorithms & Models of Computation (2024 Fall, UIUC)
- Advanced Combinatorics (2022 Fall, SJTU)
- Graph Theory and Combinatorics (2022 Spring, SJTU)

Shanghai Jiao Tong University ICPC team

Co-coach   *June 2021 - Aug. 2022*