

Ta-Wei Tu 塗大為

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Education

Stanford University

Ph.D. in Computer Science. Advisor: Aaron Sidford.

Sept. 2023 – Present

Stanford, CA, USA

National Taiwan University

B.Sc. in Computer Science and Information Engineering

Sept. 2018 – June 2022

Taipei, Taiwan

Publications

Following the convention in theoretical computer science, author names are ordered alphabetically.

- [1] Jiale Chen, Aaron Sidford, and Ta-Wei Tu. Entropy regularization and faster decremental matching in general graphs. In *arXiv Preprint*, 2023, [arXiv:2312.09077](#).
- [2] Joakim Blikstad, Sagnik Mukhopadhyay, Danupon Nanongkai, and Ta-Wei Tu. Fast algorithms via dynamic-oracle matroids. In *Proceedings of the 55th Annual ACM Symposium on Theory of Computing, STOC 2023*, pages 1229–1242. ACM, 2023, [arXiv:2302.09796](#).
- [3] Ta-Wei Tu. Subquadratic weighted matroid intersection under rank oracles. In *33rd International Symposium on Algorithms and Computation, ISAAC 2022*, volume 248 of *LIPIcs*, pages 63:1–63:14. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2022, [arXiv:2212.00508](#).

Research and Professional Experience

Research Intern, Max Planck Institute for Informatics

- Studied matroid intersection algorithms and graph algorithms. Advisor: Danupon Nanongkai.

Aug. 2022 – Dec. 2022

Software Engineering Intern, Google Taipei

- Worked on gRPC core transport based on Android binders.

June 2021 – Sept. 2021

Research Assistant, National Taiwan University

- Studied algorithm design. Advisor: Hsueh-I Lu.

Feb. 2021 – June 2022

Research Assistant, National Taiwan University

- Studied RISC-V vector extension. Advisor: Wei-Chung Hsu.

Sept. 2020 – Jan. 2021

Academic Talks

Fast Algorithms via Dynamic-Oracle Matroids

- STOC 2023, Orlando, FL

Subquadratic Weighted Matroid Intersection under Rank Oracles

- ISAAC 2023, Virtual

Selected Awards & Honors

Mr. K. K. Lee Engineering Graduate Fellowship, Stanford University

2023

18th Place, ICPC World Finals

2020

Champion, ICPC Asia-Pacific Regional Contest, Taipei Site

2018, 2020

Champion, National Collegiate Programming Contest

2018, 2019, 2020

Services

Subreviewer for STOC 2024, ESA 2023, ICALP 2023