

WEN-HORNG SHEU

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Professional Summary: PhD student in Computer Science specializing in algorithm design for parallel, distributed, and streaming computation. Research interests include combinatorial optimization and algorithmic graph theory. Over five years of research experience and a strong background in competitive programming.

EDUCATION

PhD in Computer Science at the University of California, Davis; GPA: 4.0/4.0 2023-Present

- Anticipated graduation date: June 2028 (06/28)
- Research area: Distributed Algorithms, Streaming Algorithms

Master of Computer Science at National Tsing Hua University; GPA: 3.9/4.0 2019-2021

- Specialized courses: Approximation Algorithms, Computational Geometry

Bachelor of Computer Science at National Tsing Hua University; GPA: 3.85/4.0 2015-2019

- Specialized courses: Advanced Data Structure, Randomized Algorithms, Parallel Algorithm Design

SELECTED PUBLICATIONS

Faster Semi-streaming Matchings via Alternating Trees

- Presented a new streaming algorithm for the $(1 + \epsilon)$ -approximate maximum matching problem.
- This paper improves on a STOC 2022 result and was accepted to ICALP 2025.

Faster MPC Algorithms for Approximate Allocation and Matching in Uniformly Sparse Graphs

- Developed a new distributed algorithm that has applications in online advertising and load balancing.
- This paper improves on an ICML 2018 result and was accepted to SPAA 2025.

A Framework for Boosting Matching Approximation: Parallel, Distributed, and Dynamic

- Design a framework for solving $(1 + \epsilon)$ -approximate maximum matching in distributed and dynamic settings.
- The framework implies improvements on several prior results in FOCS 2024, SODA 2025, and ICALP 2025.

SELECTED HONORS

- **Contributed Talk** at *Workshop on Local Algorithms, 2024*
hosted by Simons Institute for the Theory of Computing, UC Berkeley
 - Presented our recent research, an improved streaming algorithm for $(1 + \epsilon)$ -approximate matching.
- **Gold Award** in the 2019 ICPC Asia Pacific Taipei-Hsinchu Regional Contest
 - Attended several programming contests, including ICPC, with other students in undergraduate years.
 - Built strong abilities in teamwork and problem-solving.
- **Grandmaster on Codeforces**
 - Placed top 1% (out of 10,000+ contestants globally) in four online programming contests on Codeforces (a prestigious online competitive programming platform).
 - Ranked as a grandmaster, within top 1% globally on Codeforces (as of Feb 2021).

SKILLS

Coding Languages C, C++, Python

Tools Git, L^AT_EX, Microsoft Office

Languages English (fluent, TOEFL 105/120), Chinese (native)