

WEN-HORNG SHEU

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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.
- Learnt several techniques for designing algorithms using limited amount of memory.
- 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.
- Learnt various approaches to designing algorithms for sparse graphs.
- This paper improves on an ICML 2018 result and was accepted to SPAA 2025.

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

- Proposed a framework for solving $(1 + \epsilon)$ -approximate maximum matching in distributed and fully 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 maximum 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.
 - 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)