# WEN-HORNG SHEU

Contact: (530) 979-6045 ◇ wsheu@ucdavis.edu
Personal Website: https://whsheu.github.io/
LinkedIn: https://www.linkedin.com/in/wen-horng-sheu-2350902b4/

## Education

**PhD in Computer Science** at the University of California, Davis; GPA: 4.0/4.0 *2023-Present*
- Anticipated graduation date: June 2028
- 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**
  - Ranked as a grandmaster, within top 1% globally on Codeforces.
  - Placed top 1% (out of 10,000+ contestants globally) in four programming contests on Codeforces.

## Skills

| | |
|---|---|
| **Coding Languages** | C, C++, Python |
| **Tools** | Git, LaTeX, Microsoft Office |
| **Languages** | English (fluent, TOEFL 105/120), Chinese (native) |