

# Matthew Chou

 Matthew Chou |  matthewzchou@gmail.com |  +1 408 612 2256

## EDUCATION

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**University of Illinois Urbana Champaign, BSEE**

August 2025 - August 2028

**GPA: 4.00/4.00**

Relevant Coursework: Intro to Electronics (ECE 110), Intro to Computing (ECE 120), Multivariable Calculus (Math 241), Linear Algebra (Math 257), Physics E and M (Phys 212), Quantum Physics (Phys 214), Thermal Physics (Phys 213)

## WORK EXPERIENCE

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**Tutor**

Jan 2024 - June 2025

- Experience with tutoring in AP Statistics, multiple times a week

## PROJECTS

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**Illini Solar Car**

August 2025 - Present

- Embedded Programming on ARM M3 Cortex Processor and gained experience in soldering

**Client/Server Messaging Service**

December 2025 - Present

- Wrote a user space network application using TCP/UDP over IP

**Finding the Meeting Point of Directed and Undirected Graphs**

May 2024 - February 2025

- Published the research on both arxiv and IEEE ICNC 2025
- Researched and developed a novel algorithm for finding the center and centroid of directed/undirected graphs and wired/wireless networks
- Patented the algorithm for finding meeting locations for mapping applications.

**Image Processing Tools**

May 2023 - August 2023

- Histogram Equalization, Convolution with different filters, and Image Rotation

## PUBLICATIONS

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Chou, Matthew (Aug. 2024). "Finding the Center and Centroid of a Graph with Multiple Sources". In: *arXiv preprint arXiv:2408.13688*. DOI: [10.48550/arXiv.2408.13688](https://doi.org/10.48550/arXiv.2408.13688). arXiv: [2408.13688](https://arxiv.org/abs/2408.13688) [cs.DM]. URL: <https://arxiv.org/abs/2408.13688>.

– (2025). "Distributed Edge Computation for Finding an Optimal Meeting Location". In: *2025 International Conference on Computing, Networking and Communications (ICNC)*. Honolulu, HI, USA, pp. 79–83. DOI: [10.1109/ICNC64010.2025.10993620](https://doi.org/10.1109/ICNC64010.2025.10993620).

## SKILLS/HONORS

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Valedictorian, Evergreen Valley High School

Proficient in Vi/Linux, LaTeX, Java, C, Python, bash

3x AIME Qualification