

Olivia Weng

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Education

University of California, San Diego

PhD (*In progress*), Computer Science and Engineering

2020 - Present

Advisor: Ryan Kastner

The University of Chicago

BS, Computer Science *spec.* Computer Systems

2016 - 2020

Advisor: Yanjing Li

Employment

Braintree, Software Engineer Intern

Jun 2019 - Aug 2019

- Reduced company spending on AWS by building two Lambda functions scheduled to delete costly stale EBS volumes and AMIBake disk snapshots every day
- Automated previously manual management of 50 AWS user groups for 400 software developers in Terraform and Go

The University of Chicago, Research Assistant

Jun 2018 - Sep 2018

- Designed a novel hardware cache that defends against cache attacks by obscuring the architectural state through cache compression
- Conducted a security evaluation on the cache design using Python and Intel Pin to determine the design was indeed secure against last-level cache attacks

Gridless Power Corporation, Software Intern

Jun 2017 - Aug 2017

- Upgraded database from local AWS EC2 host to Compose.io MongoDB database of 200+ remote batteries' data to streamline the data inputting and monitoring process
- Overhauled deployment of battery-monitoring Meteor web app hosting from AWS to Meteor Galaxy for faster redeployment and monitoring

The University of Chicago, Computer Lab Tutor

Jan 2017 - Jun 2020

- Led team of three to revamp computer lab security standards by integrating the 1PASSWORD password manager and SSH keys as the only points of access to the lab servers
- Imaged and monitored 50+ floor machines on-site and remotely via Ansible and Jenkins in a team of four to install and update software and applications

Publications

1. **Olivia Weng** and Andrew A. Chien. Evaluating Achievable Latency and Cost: SSD Latency Predictors. In *Proceedings of the Workshop on Accelerated Machine Learning, AccML@HiPEAC: High Performance Embedded Architectures and Compilers, 15th International Conference*. January, 2020.

Awards

Jacobs School of Engineering Fellowship, University of California, San Diego

2020 - 2022

Dean's Fund for Undergraduate Research, The University of Chicago

2020

Dean's List, The University of Chicago

2017, 2018, 2019

Grace Hopper Conference Scholarship, The University of Chicago

2018

Teaching

CMSC 15400: Introduction to Computer Systems – <i>Grader</i>	Spring 2020
CMSC 15200: Introduction to Computer Science II – <i>Grader</i>	Summer 2018, Winter 2019
CMSC 22200: Computer Architecture – <i>Grader</i>	Spring 2018
CMSC 16100: Honors Introduction to Computer Science I – <i>Grader</i>	Autumn 2017

Service

Society of Women Engineers' Girls' Day in STEM , Volunteer	May 2019
<ul style="list-style-type: none">· Created a workshop that taught basic cryptography topics, in which 50 middle and high school girls participated· Facilitated a discussion on diversity and what it means to be a woman in STEM among a group of 7 local Chicago middle school girls	
compileHer Tech Capstone 2019 , Volunteer	Apr 2019
<ul style="list-style-type: none">· Led a group of 12 local Chicago middle school girls through interactive workshops that introduced select computer science topics, guiding them through completing each activity	
ACM-W@UChicago Mentorship Program , Undergraduate Mentor	May 2018 - Jun 2020
<ul style="list-style-type: none">· Guided Neha through how to start research and secure a research advisor, pointing her to various professors in the department with whom she could potentially work—she worked with Professor Shan Lu· Supported and checked in with Melanie as she went through the internship recruiting process and the CS major at UChicago, reviewing her resume and helping her select classes	
CS Student Activities Council , Student Representative	Sep 2017 - Jun 2020
<ul style="list-style-type: none">· Secured funding to support four computer science student organizations on campus to host events that foster collaboration and grow the undergraduate tech community at UChicago	
Asynchronous Anonymous , Director	Jan 2017 - Jun 2020
<ul style="list-style-type: none">· Coordinated weekly tech talks given by a diverse set of undergraduates, elevating minority speakers, to build an inclusive tech community at UChicago, engaging students with new technologies	
ACM-W@UChicago , Board Member	Jan 2017 - Jun 2018
<ul style="list-style-type: none">· Organized study breaks and student panels in committee of five women computer science majors weekly to bring women and minority computer science community together and discuss diversity issues in the tech industry	

Extra-curricular Activities

University Theater , Actor	Jan 2020 - June 2020
University Double Woodwind Quintet , French horn player	Apr 2018 - Jun 2018
University Symphony Orchestra , French horn player	Oct 2017 - Jun 2018
University Chamber Orchestra , French horn player	Oct 2016 - Jun 2017
Taiwanese-American Student Association	Oct 2016 - Present
Events chair, Family head, Advisory board	