

Wentao Guo

wguo5@umd.edu

EDUCATION

University of Maryland

Ph.D. in *Computer Science* (human-centered security and privacy)

College Park, MD
Expected May 2026

- Advised by Michelle Mazurek

Pomona College

B.A. (double major) in *Computer Science and Science, Technology, and Society*

Claremont, CA
May 2019

- *Magna cum laude*, 3.96 GPA, Phi Beta Kappa
- Senior project in Computer Science: “Privacy Poli-see: An Interactive Tool for Visualizing Privacy Policies” (advised by Eleanor Birrell)
 - Awarded Distinction in the Senior Exercise
- Senior thesis in Science, Technology, and Society: “Towards a Critical Understanding of Deepfakes: Developing a Teaching Module and More” (advised by Laura Perini and Brian Keeley)
 - Awarded Distinction in the Senior Exercise

RESEARCH AND WORK EXPERIENCE

Software Developer

September 2019 – June 2021

Epic Systems

Verona, WI

- Design and develop features for Cosmos, a service that aggregates electronic health records of >100 million patients in a HIPAA-regulated limited dataset for research and data-driven healthcare
- Led a high-priority project creating software to convert Cosmos into a highly scalable form, in order to accommodate drastically increased research needs during the COVID-19 pandemic
- Organize company-wide voter registration efforts ahead of the November 2020 election, leading remote workshops that helped 110 employees register to vote

Research Programmer

June 2019 – August 2019

Ecosystem Dynamics and Forecasting Lab

Virginia Tech

- Fixed functionality-breaking bugs in the open-source General Lake Model (GLM) project: <https://github.com/AquaticEcoDynamics/GLM/pull/16>
- Wrote an R script to automatically format and validate data that is regularly uploaded by field sensors
- Prototyped a user interface for water quality forecasts using the Shiny R package

Researcher (Usable Privacy and Security)

May 2018 – July 2018

REU in Socially Relevant Computing (advised by Dr. Heather Lipford)

UNC Charlotte

- Prototyped an Android app to help families and other communities of users to collaboratively navigate privacy and security settings
- Designed a user study and conducted ten hour-long interviews to evaluate participants’ responses to our model of community oversight for privacy and security
- Won first place in the program’s research poster competition
- Co-developed a codebook for interviews conducted by a PhD student on health app privacy

PUBLICATIONS

Wentao Guo, Jason Walter, and Michelle L. Mazurek. The Role of Professional Product Reviewers in Evaluating Security and Privacy. USENIX Security Symposium (USENIX ’23). August 2023.

[submitted] Michael Coblenz, Wentao Guo, Kamatchi Voozhian, Jeffrey S. Foster. [Interview study on developers’ use of APIs (paraphrased to avoid violating double-blind review).]

Wentao Guo, Jay Rodolitz, and Eleanor Birrell. Poli-see: An Interactive Tool for Visualizing Privacy Policies. ACM CCS Workshop on Privacy in the Electronic Society (WPES '20). November 2020.

Zaina Aljallad, **Wentao Guo**, Chhaya Chouhan, Christy LaPerriere, Jess Kropczynski, Pamela Wisniewski, and Heather Lipford. Designing a Mobile Application to Support Social Processes for Privacy Decisions. NDSS Workshop on Usable Security (USEC '19). February 2019.

POSTERS

Wentao Guo, Jay Rodolitz, and Eleanor Birrell. Poli-see: An Interactive Tool for Visualizing Privacy Policies. Symposium on Usable Privacy and Security (SOUPS '21). August 2021.

RESEARCH PROPOSALS

Richard Roberts, **Wentao Guo**, Omer Akgul, Michelle L. Mazurek, and Dave Levin. This Proposal Was Brought to You by Content Creators' Mental Models of Security & Privacy Products. IEEE S&P Workshop on Technology and Consumer Protection (ConPro '23). May 2023.

Wentao Guo, Jason Walter, and Michelle L. Mazurek. The Role of Product Reviewers in Evaluating Security and Privacy. IEEE S&P Workshop on Technology and Consumer Protection (ConPro '22). May 2022.

ACTIVITIES

City-Appointed Member June 2022 – Present
Committee for a Better Environment College Park, MD

- Lead a group researching a climate action plan for the City of College Park
- Write articles and plan events to communicate environment-related information (e.g., financial resources for improving home energy efficiency) to residents

Organizer September 2021 – Present
Graduate Security Reading Group University of Maryland

- Plan weekly research paper discussions

Project Leader and Volunteer January 2020 – June 2021
350 Madison Madison, WI

- Led a team of six volunteers helping the City of Madison implement a program to track municipal and commercial building energy use (aka *benchmarking*)
- Researched the benefits of benchmarking, provided feedback on the content and usability of a prototype benchmarking data portal, and conducted interviews with business leaders to inform future city-wide energy efficiency policy
- Received one of two outstanding volunteer recognitions in 2020

Organizer September 2017 – May 2019
Tech for Good Pomona College

- Co-founded a student organization focused on (1) using student expertise in technology for good and (2) creating campus-wide discussions on the social, ethical, and legal aspects of technology
- Organized three talks by experts in technology, law, and ethics (median attendance of 80), as well as other discussions and events centered around similar themes
- Created a new website for a non-profit serving local low-income communities, in order to make their services more accessible and responsive

Lead Organizer May 2017 – November 2018
5C Hackathon Pomona College

- Oversaw logistics, publicity, and sponsorship for annual hackathons drawing 200+ students from the Claremont Colleges and surrounding schools
- Developed and updated 5chackathon.com

Organizer and Volunteer

April 2017 – May 2019

Solar & Social Justice

Pomona College

- Co-founded a student organization volunteering with a non-profit to install free solar panels for low-income homeowners living in polluted areas
- Volunteered to install free solar panels for low-income homeowners living in polluted areas
- Connected Pomona College staff to opportunities for free solar panels

SELECTED AWARDS**Paul B. Yale Computer Science Prize**

Pomona College, Spring 2019

Awarded annually to an outstanding senior majoring in Computer Science

- In 2019, this award was split among three students

Science, Technology and Society Prize

Pomona College, Spring 2019

Awarded to one outstanding graduating senior in the STS major

Cecil H. Short Memorial Prize

Pomona College, Spring 2019

Awarded by the Music Department to graduating seniors who are outstanding in service and performance

Phi Beta Kappa

Pomona College, inducted in Spring 2018

1 of 8 students inducted early in the class of 2019, during the spring of our third year

TEACHING**Guest Lecture: AI and Algorithms (Privacy, Security, and Ethics for Big Data)**

Spring 2023

College of Information Studies

University of Maryland

Guest Lecture: Buffer Overflow (Computer and Network Security)

Spring 2022

Computer Science Department

University of Maryland

Teaching Assistant (Computer Systems)

Spring 2019

Computer Science Department

Pomona College

Guest Lecture: Deepfakes (Philosophy of Technology)

Spring 2019

Philosophy Department

Pomona College

Teaching Assistant (Computability and Logic)

Spring 2018

Computer Science Department

Pomona College

Workshop Instructor (Intro to Web Dev, Deepfakes and Deceptive Technologies)

Spring 2018

Claremont Splash (one-day teaching event for high school students)

Pomona College

Workshop Instructor (Intro to Web Dev)

Fall 2017

5C Hackathon

Pomona College

Teaching Assistant (HTML & CSS Honors, Literary Analysis Honors)

Summer 2017

Center for Talent Development, Grades 7 and 8

Northwestern University

- Designed and taught a 90-hour curriculum for HTML & CSS Honors, with input from the course instructor
- Led discussions, gave lectures, and workshopped student writing for Literary Analysis Honors

SKILLS**Computer** – Java, Python / NLTK (natural language processing), R, HTML, CSS, JavaScript / TypeScript / D3.js (data visualization), C, C#, Visual Basic, LaTeX, ML, MUMPS (M)**Languages** – spoken Mandarin (native), French (proficient)