

# Wentao Guo

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## EDUCATION

### University of Maryland

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

- Advised by Michelle Mazurek

College Park, MD

Expected May 2026

### Pomona College

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

- *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

Claremont, CA

May 2019

## 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

Michael Coblenz, **Wentao Guo**, Kamatchi Voozhian, Jeffrey S. Foster. A qualitative study of REST API design and specification practices. IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC '23). October 2023.

**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.

**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)**

College of Information Studies

Spring 2023

University of Maryland

**Guest Lecture: Buffer Overflow (Computer and Network Security)**

Computer Science Department

Spring 2022

University of Maryland

**Teaching Assistant (Computer Systems)**

Computer Science Department

Spring 2019

Pomona College

**Guest Lecture: Deepfakes (Philosophy of Technology)**

Philosophy Department

Spring 2019

Pomona College

**Teaching Assistant (Computability and Logic)**

Computer Science Department

Spring 2018

Pomona College

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

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

Spring 2018

Pomona College

**Workshop Instructor (Intro to Web Dev)**

5C Hackathon

Fall 2017

Pomona College

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

Center for Talent Development, Grades 7 and 8

Summer 2017

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)