Wentao Guo

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EDUCATION

PhD in *Computer Science* University of Maryland

Expected May 2026 College Park, MD

Advised by Michelle Mazurek, focusing on human-centered security and privacy

B.A. in *Computer Science* and *Science, Technology, and Society* Pomona College

May 2019

Claremont, CA

• Magna cum laude, Phi Beta Kappa

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 Wisnewski, and Heather Lipford. Designing a mobile application to support social processes for privacy decisions. NDSS Workshop on Usable Security (USEC '19). February 2019.

WORK EXPERIENCE

IoT Design Fellow Consumer Reports

June 2023 – September 2023

New York, NY

- Designed, conducted, and analyzed four studies (surveys, focus groups, and user studies) on consumer perspectives on IoT security and privacy labels, in collaboration with two other fellows
- Interviewed IoT manufacturers to understand challenges regarding the process for companies to attest to their products' security and privacy

Software developer Epic Systems

September 2019 – June 2021

Verona, WI

- Designed and developed features for Cosmos, a service that aggregates electronic health records of >100 million patients in a HIPAA-regulated limited dataset for research and datadriven 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
- Organized 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 bugs in the open-source General Lake Model (GLM) project: https://github.com/AguaticEcoDynamics/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

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.

SELECTED RESEARCH PROPOSALS and INVITED TALKS

[talk] **Wentao Guo**. De-identification in practice: professionals as end users. Symposium on Usable Privacy and Security (SOUPS '23). August 2023.

[proposal] 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.

ACTIVITIES

Project mentor

October 2023

Tech + Research: Welcoming Women to Computing Research

University of Maryland

 Designed a short research project in human-centered security and privacy and mentored five women undergraduates as they completed it over a weekend

Peer mentor

September 2023 - Present

Computer Science Graduate Program

University of Maryland

 Meeting regularly with four first-year grad students to offer support and guidance on graduate life, research, and coursework

Committee member

June 2022 - Present

Committee for a Better Environment

College Park, MD

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

Chair of Community Building

Computer Science Graduate Student Committee

October 2021 – Present University of Maryland

- Managing student-organized community events for the department
- Planning regular board game socials

Organizer

September 2021 - Present

Graduate Security Reading Group

University of Maryland

Planning weekly research paper discussions, practice talks, invited speakers, and workshops

Project leader 350 Madison

January 2020 - June 2021

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

SELECTED AWARDS

MC2 Seed Grant

University of Maryland, Fall 2023

Awarded \$1,890 to fund a research proposal on perceptions of tracking and inference in VR

Paul B. Yale Computer Science Prize

Pomona College, Spring 2019

Awarded to three outstanding seniors majoring in Computer Science

Science, Technology and Society Prize

Pomona College, Spring 2019

Awarded to one outstanding senior majoring in STS

Distinction in the Senior Exercise: Computer Science

Pomona College, Spring 2019

"Privacy Poli-see: An interactive tool for visualizing privacy policies" (advised by Eleanor Birrell)

Distinction in the Senior Exercise: Science, Technology, and Society Pomona College, Spring 2019 "Towards a critical understanding of deepfakes: Developing a teaching module and more" (advised by Laura Perini and Brian Keeley)

TEACHING ASSISTANTSHIPS

Computer Systems (Spring 2019) Pomona College Computer Science Department

Computability and Logic (Spring 2018) Pomona College Computer Science Department

HTML & CSS (Summer 2017) Northwestern Center for Talent Development (grades 7 & 8)

Literary Analysis (Summer 2017) Northwestern Center for Talent Development (grades 7 & 8)

GUEST LECTURES

Intro to security Spring 2024

Privacy, Security, and Ethics for Big Data

UMD College of Information Studies

Al and algorithms Spring 2023

Privacy, Security, and Ethics for Big Data

UMD College of Information Studies

Buffer overflow Spring 2022

Computer and Network Security UMD Computer Science Department

Deepfakes Spring 2019

Philosophy of Technology Pomona College Philosophy Department

Intro to web development

Claremont Splash (student-led educational event for high schoolers)

Spring 2018

Spring 2018

Deepfakes and deceptive technologies

Claremont Splash (student-led educational event for high schoolers)

Intro to web development

Fall 2017

5C Hackathon

EXTERNAL REVIEWING

- CHI '24
- SOUPS '24 (1 sub-review)
- CSCW '24 (2 reviews)
- International Journal of Human-Computer Studies '23
- IEEE S&P '23 (1 sub-review)

SKILLS

Computer – Python / NLTK (natural language processing) / Puppeteer (browser automation), R, Java, HTML, CSS, JavaScript / TypeScript / D3.js (data visualization), 11ty (web dev), C, C#, Visual Basic, LaTeX, ML, MUMPS (M), Unity

Languages – spoken Mandarin (native), French (proficient)