Wentao Guo

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EDUCATION

PhD in *Computer Science* University of Maryland

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

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

• 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

Ecosystem Dynamics and Forecasting Lab

• Fixed bugs in the open-source General Lake Model (GLM) project: <u>https://github.com/AguaticEcoDynamics/GLM/pull/16</u> June 2019 – August 2019 Virginia Tech

May 2019 Claremont, CA

Expected May 2026

College Park, MD

- 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. Incentives, expertise, and capacity: Unlocking the power of professionals to protect users' security and privacy. Virginia Polytechnic University. May 2024.

[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

September 2023 – Present

University of Maryland

June 2022 – Present

College Park, MD

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

Committee member

Peer mentor

Committee for a Better Environment

- 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

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

Organizer

Graduate Security Reading Group

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

Project leader

350 Madison

• Led a team of six volunteers helping the City of Madison implement a program to track municipal and commercial building energy use (aka *benchmarking*)

October 2021 – Present University of Maryland

September 2021 – Present University of Maryland

January 2020 – June 2021 Madison. WI

- 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

Tech for Good

September 2017 – May 2019

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 Awarded \$1,890 to fund a research proposal on perceptions of tracking	University of Maryland, Fall 2023 g and inference in VR
Paul B. Yale Computer Science Prize Awarded to three outstanding seniors majoring in Computer Science	Pomona College, Spring 2019
Science, Technology and Society Prize Awarded to one outstanding senior majoring in STS	Pomona College, Spring 2019

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 Privacy, Security, and Ethics for Big Data	Spring 2024 UMD College of Information Studies	
AI and algorithms Privacy, Security, and Ethics for Big Data	Spring 2023 UMD College of Information Studies	
Buffer overflow Computer and Network Security	Spring 2022 UMD Computer Science Department	

Deepfakes Philosophy of Technology	Spring 2019 Pomona College Philosophy Department
Intro to web development Claremont Splash (student-led educational event for high scho	Spring 2018
Deepfakes and deceptive technologies Claremont Splash (student-led educational event for high scho	Spring 2018
Intro to web development 5C Hackathon	Fall 2017

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)