Wentao Guo

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EDUCATION

Aug '21 – May '26 **PhD in Computer Science**, University of Maryland (UMD)

(expected) Dissertation: Supporting data de-identification in an era of open science (advised by Dr. Michelle Mazurek)

Aug '15 – May '19 **B.A. in Computer Science and Science, Technology, and Society**, Pomona College *Magna cum laude*, Phi Beta Kappa, Distinction in the Senior Exercise (x2)

- Computer Science thesis: *Poli-see: An interactive tool for visualizing privacy policies* (advised by Dr. Eleanor Birrell)
- Science, Technology, and Society thesis: Towards a critical understanding of deepfakes: Developing a teaching module and more (advised by Drs. Laura Perini and Brian Keeley)

CONFERENCE PAPERS

- * indicates mentored undergraduate student
- PETS '26 **Wentao Guo**, Alexander Yang,* Nathan Malkin, Michelle L. Mazurek. How experts personalize privacy & security advice for at-risk users. Privacy Enhancing Technologies Symposium. https://wentaoguo.com/publications/at-risk-advice/
- CCS '25 Yunze Zhao, **Wentao Guo**, Harrison Goldstein, Daniel Votipka, Kelsey Fulton, Michelle L. Mazurek. A qualitative analysis of fuzzer usability and challenges. ACM Conference on Computer and Communications Security. https://wentaoguo.com/publications/fuzzing-usability/
- USENIX '25 **Wentao Guo**, Paige Pepitone, Adam J. Aviv, Michelle L. Mazurek. How researchers de17% accept identify data in practice. USENIX Security Symposium.

 rate https://www.usenix.org/conference/usenixsecurity25/presentation/guo-wentao
- CCS '24 **Wentao Guo**, Aditya Kishore,* Adam J. Aviv, Michelle L. Mazurek. A qualitative analysis of practical de-identification guides. ACM Conference on Computer and Communications Security. https://doi.org/10.1145/3658644.3690270
- VL/HCC '23 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. https://doi.org/10.1109/VL-HCC57772.2023.00025
- USENIX '23 **Wentao Guo**, Jason Walter,* and Michelle L. Mazurek. The role of professional product reviewers in evaluating security and privacy. USENIX Security Symposium. https://www.usenix.org/conference/usenixsecurity23/presentation/guo-wentao

WORKSHOP PAPERS

- WPES '20 **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. https://doi.org/10.1145/3411497.3420221
- USEC '19 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. https://www.ndss-symposium.org/ndss-paper/auto-draft-25/

WORKSHOP PROPOSALS

- ConPro '23 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 '22 **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.

SELECTED TALKS

- May '24 Incentives, expertise, and capacity: Unlocking the power of professionals to protect users' security and privacy. Virginia Polytechnic University.
- Mar '24 Understanding de-identification guidance and practices for researchers. NSF Cybersecurity Innovation for Cyber Infrastructure (CICI) PI meeting.
- Dec '23 Scientists are users too! Understanding de-identification practices, mental models, and challenges. Capital-Area Colloquium on Trustworthy and Usable Security/Privacy.
- Aug '23 De-identification in practice: professionals as end users. Symposium on Usable Privacy and Security.
- Dec '22 The role of professional product reviewers in evaluating security and privacy. Capital-Area Colloquium on Trustworthy and Usable Security/Privacy (co-presented by Jason Walter).

POSTERS

- SOUPS '24 Understanding de-identification guidance and practices for research data. Symposium on Usable Privacy and Security.
- SOUPS '21 Poli-see: An interactive tool for visualizing privacy policies. Symposium on Usable Privacy and Security.

TEACHING ASSISTANTSHIPS

- Spring '25 Introduction to Privacy, UMD CS
- Fall '24 Human Factors in Security and Privacy, UMD CS
- Spring '19 Computer Systems, Pomona College CS
- Spring '18 Computability and Logic, Pomona College CS

GUEST LECTURES

- Spring '25 **Privacy for at-risk individuals**; Introduction to Privacy; UMD CS
- Spring '25 Modern privacy enforcement; Introduction to Privacy; UMD CS
- Fall '24 Qualitative research methods; Human Factors in Security & Privacy; UMD CS
- Spring '24 Intro to security; Privacy, Security, and Ethics for Big Data; UMD Info Studies
- Spring '23 Al and algorithms; Privacy, Security, and Ethics for Big Data; UMD Info Studies
- Spring '22 Buffer overflow attacks; Computer and Network Security; UMD CS
- Spring '19 **Deepfakes**; Philosophy of Technology; Pomona College Philosophy
- Spring '18 Intro to web development; Claremont Splash (educational event for high schoolers)

Spring '18 **Deepfakes and deceptive technologies**; Claremont Splash

Fall '17 Intro to web development; 5C Hackathon

SELECTED WORK EXPERIENCE

Jun – Sep '23 **IoT Design Fellow**, Consumer Reports

Conducted four studies (surveys, focus groups, and user studies) to understand consumer perspectives on IoT security and privacy labels, with two other fellows.

Sep '19 – Jun '21 **Software developer**, Epic Systems

Developed backend infrastructure and data ingestion for <u>Cosmos</u>, a HIPAA-regulated dataset of >100 million patients' electronic health records supporting research and data-driven healthcare.

Jun – Aug '19 Programmer, Virginia Tech Ecosystem Dynamics and Forecasting Lab

Contributed <u>bug fixes</u> to the open-source General Lake Model project and created a QA/QC script for ecological data from field sensors.

May – Jul '18 Researcher, University of North Carolina at Charlotte REU in Socially Relevant Computing

Co-led research in usable security and privacy leading to a publication in 2019; won first place in the REU research poster competition. Assisted in data analysis for a <u>publication</u> by Alghatani and Lipford in SOUPS '19, for which I am named in the acknowledgments.

Jun – Aug '17 **Teaching assistant**, Northwestern University Center for Talent Development

Co-designed and co-taught HTML & CSS Honors; served as teaching assistant for Literary Analysis Honors: The Turing Test, Artificial Intelligence, & the Human Program (both courses equivalent to a one-semester high school class).

SELECTED SERVICE

Fall '23 – Present Chair of Community Building, UMD CS Graduate Student Committee

Managing the department's peer mentoring program, as well as regular studentorganized community-building events including practical workshops and socials; personally mentored eight new graduate students.

Fall '23 – Present **Project mentor**, UMD Tech + Research workshop

Designed two sprint-style (~13 hours for teams of 8) research projects in security and privacy, and mentored women undergraduates as they completed them over the course of a weekend (Oct '23 and '24).

Spring '22 – Pres. Committee member, College Park Committee for a Better Environment

Leading a team of three committee members (appointed by City Council) in drafting a climate action plan for College Park, for which I have been meeting with the mayor, city councilors, city staff, and conducting participatory info sessions at local civic associations to ground policymaking in community input. Planning sustainability-oriented community events and writing letters to the city government advising action on energy efficiency, road de-icing practices, etc.

Fall '21 – Present Coordinator, Maryland Cybersecurity Center reading group

Planning weekly research paper discussions, practice talks, invited talks, and workshops for a group of 20+; facilitating discussion.

Jan '20 – Jun '21 **Team leader**, 350 Madison

Led a team of six volunteers that successfully advocated for the City of Madison to implement the <u>Building Energy Savings Program</u> to track and improve energy efficiency

in commercial buildings. Received one of two Outstanding Volunteer Recognitions in 2020.

Sep '17 – May '19 **Organizer**, Pomona College Tech for Good (student organization)
Organized three talks by experts in technology, law, and ethics (median attendance of 80), as well as related discussion groups. As part of a project team, worked with a nonprofit serving local low-income communities to improve their website.

Aug '16 – May '17 **Peer mentor**, Pomona College Asian American Mentor Program Mentored ten first-year students; organized activities on history, diversity, social justice.

EXTERNAL PEER REVIEW (including reviews and sub-reviews)

- CHI '25/'24 (ACM Conference on Human Factors in Computing Systems)
- SOUPS '25/'24 (Symposium on Usable Privacy and Security)
- ESORICS '25 (European Symposium on Research in Computer Security)
- CSCW '24 (ACM Conference on Computer-Supported Cooperative Work & Social Computing)
- **IEEE S&P '23** (IEEE Symposium on Security and Privacy)
- International Journal of Human-Computer Studies '23

SELECTED AWARDS

Fall '23	Maryland Cybersecurity Center Seed Grant, UMD Awarded \$1,890 to fund a research proposal on perceptions of tracking and inference in VR.
Spring '19	Paul B. Yale Computer Science Prize, Pomona College
	Awarded to three outstanding seniors majoring in CS.

Spring '19 **Science, Technology, and Society Prize**, Pomona College Awarded to one outstanding senior majoring in Science, Technology, and Society.

UNDERGRADUATE RESEARCH MENTORSHIP

Spring '25 – Present	Azwa Bajwah
Spring '23 – Fall '24	Aditya Kishore
Fall '23 – Spring '24	Samuel Wiggins
Fall '23 – Spring '24	Alexander Yang
Fall '21 – Spring '23	Jason Walter

GRADUATE PEER MENTORSHIP

2025 – Present	Will Russo, PhD student
2025 – Present	Pranav Asthana, PhD student
2024 – 2025	Shayan Shabihi, PhD student
2024 – 2025	Daniel Ekpo, PhD student
2024	Annie Dai, PhD student
2023 – 2024	Sadia Nourin, MS student
2023 – 2024	Hillary Owusu, PhD student
2023 – 2024	Olivia Taylor, MS student

REFERENCES

Michelle Mazurek

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Jessica Vitak

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