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 deidentify data in practice. USENIX Security Symposium. 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 with 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 and 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 (student-led workshops for high schoolers)
- Spring '18 Deepfakes and deceptive technologies; Claremont Splash

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 Cosmos, a HIPAA-regulated dataset of >100 million patients' electronic health records that supports 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. 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 publication by Alqhatani 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.

SELECTED SERVICE

Dec '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.

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

Designed and mentored three research projects for teams of undergraduate women, as part of an initiative that aims to make computing research and graduate school

more accessible to students of underrepresented genders.

Jun '22 – Present 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; to this end, meeting with the mayor, city councilors, city staff, and conducting participatory info sessions at local civic associations. Planning sustainability-oriented community events and advising the city

government on energy efficiency, road de-icing practices, etc.

Sep '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 **Building Energy Savings Program** to improve energy efficiency in

> commercial buildings. Awarded one of two 2020 Outstanding Volunteer Recognitions.

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 online access to services.

EXTERNAL PEER REVIEW (10 total, including both reviews and sub-reviews)

- CHI '26/'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 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	2025 – Present	Will Russo, PhD student
2024 – 2025 Daniel Ekpo, PhD student 2024 Annie Dai, PhD student	2025 – Present	Pranav Asthana, PhD student
2024 Annie Dai, PhD student	2024 – 2025	Shayan Shabihi, PhD student
	2024 – 2025	Daniel Ekpo, PhD student
2023 – 2024 Sadia Nourin, MS student	2024	Annie Dai, PhD student
	2023 – 2024	Sadia Nourin, MS student
2023 – 2024 Hillary Owusu, PhD student	2023 – 2024	Hillary Owusu, PhD student
2023 – 2024 Olivia Taylor, MS student	2023 – 2024	Olivia Taylor, MS student