Yuxi Wu

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Summary

My research sits at the intersection of usable privacy and security, human-computer interaction, and design, via a lens of critical theory. I design collaborative and social systems that help people with privacy and security problems respond to their harms.

Education

Georgia Institute of Technology Ph.D., Computer Science. 2024.

Dissertation: "Designing Collective Action Systems for User Privacy."

Advisors: Sauvik Das and W. Keith Edwards.

Committee: Joseph Calandrino, Christopher Le Dantec, Richmond Wong, Ellen Zegura.

University of Chicago M.S., Computational Analysis & Public Policy. 2018.

University College London B.A., Economics and Business. 2015.

Employment

Northeastern University *Distinguished Postdoctoral Research Fellow.* 2024 to present. Faculty Mentors: Ada Lerner and Alexandra To.

Awards

JP Morgan Chase AI Research PhD Fellowship. 2023 to 2024.

Georgia Institute of Technology President's Fellowship. 2019 to 2023.

CSCW Best Paper Honorable Mention. 2021.

Refereed Publications

Design(ing) Fictions for Collective Civic Reporting of Privacy Harms. Yuxi Wu, William Agnew, W. Keith Edwards, Sauvik Das. Forthcoming at **CSCW** 2025.

Modeling End-User Affective Discomfort with Mobile App Permissions across Physical Contexts. Yuxi Wu, Jacob Logas, Devansh Ponda, Julia Haines, Jiaming Li, Jeffrey Nichols, W. Keith Edwards, Sauvik Das. Forthcoming at Symposium on Usable Security and Privacy (**USEC**) 2025.

On-demand RFID: Improving Privacy, Security, and User Trust in RFID Activation through Physically-Intuitive Design. Youngwook Do, Tingyu Cheng, Yuxi Wu, Hyunjoo Oh, Daniel Wilson, Gregory D. Abowd, Sauvik Das. Forthcoming at Symposium on Usable Security and Privacy (USEC) 2025.

The Slow Violence of Surveillance Capitalism: How Online Behavioral Advertising Harms People. Yuxi Wu, Sydney Bice, W. Keith Edwards, Sauvik Das. In Proc. ACM Conference on Fairness, Accountability, and Transparency (**FACCT**), 2023.

Sok: Social Cybersecurity. Yuxi Wu, W. Keith Edwards, Sauvik Das. In Proc. IEEE Symposium on Security and Privacy (**Oakland**), 2022.

"A Reasonable Thing to Ask For": Towards a Unified Voice in Grassroots Privacy Collective Action. Yuxi Wu, Sauvik Das, W. Keith Edwards. In Proc. ACM Conference on Human Factors in Computing Systems (CHI), 2022.

Smart Webcam Cover: Exploring the Design of an Intelligent Webcam Cover to Improve Usability and Trust. Youngwook Do, Jung Wook Park, Yuxi Wu, Avinandan Basu, Dingtian Zhang, Gregory D. Abowd, Sauvik Das. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 2021.

Exploring the Utility Versus Intrusiveness of Dynamic Audience Selection on Facebook. Sindhu Kiranmai Ernala, Stephanie Yang, <u>Yuxi Wu</u>, Rachel Chen, Kristen Well, Sauvik Das. Proceedings of the ACM on Human-Computer Interaction, Computer-Supported Cooperative Work and Social Computing (**CSCW**), 2021. *Best Paper Honorable Mention.

"Your Secrets Are Safe": How Browsers' Explanations Impact Misconceptions About Private Browsing Mode. Yuxi Wu, Panya Gupta, Miranda Wei, Yasemin Acar, Sascha Fahl, Blase Ur. In Proc. 2018 Web Conference (**WWW**), 2018.

In-Progress Work

"If you don't trust them you're screwed": Security and Privacy Challenges in Client-Provider Relationships within Homeless Services. Yuxi Wu, Ruoxi Zhang, Shiyue Liu, Mufei He, Aidan Hong, Jeremy J. Northup, Calla Kainaroi, Fei Fang, Hong Shen. Under review.

Physically-intuitive Privacy and Security: A Design Paradigm for Building User Trust in Smart Sensing Environments. Youngwook Do, Yuxi Wu, Gregory D. Abowd, Sauvik Das. Under review.

Invited Papers

Privacy for the People? Exploring Collective Action as a Mechanism to Shift Power to Consumers in End-User Privacy. Sauvik Das, W. Keith Edwards, DeBrae Kennedy-Mayo, Peter Swire, and Yuxi Wu. **IEEE Security & Privacy Magazine**, 2021.

Posters & Workshops

Design(ing) Fictions for Collective Civic Reporting of Privacy Harms. Yuxi Wu, William Agnew, W. Keith Edwards, Sauvik Das. The 6th Annual Symposium on Applications of Contextual Integrity (**PrivaCI**), 2024.

SoK: Social Cybersecurity. Yuxi Wu, W. Keith Edwards, Sauvik Das. Symposium on Usable Privacy and Security (**SOUPS**), 2023.

Blog Posts

From Our Fellows: How Online Behavioral Advertising Harms People. Sauvik Das and Yuxi Wu. Center for Democracy and Technology, 2021. https://cdt.org/insights/how-online-behavioral-advertising-harms-people/

Invited American Association for the Advancement of Science (AAAS) Annual Meeting. 02/25.

Talks

"Designing Collective Action Systems for User Privacy."

University of Maryland-Baltimore County School of Public Policy. 04/24.

"Taxonomizing, Measuring, and Responding to Privacy Harms."

University of Maryland-College Park Host: Dana Priest. 01/24.

"Ad Technology Infrastructures."

Carnegie Mellon University Host: Sauvik Das. 03/23.

"Designing Collective Action Systems for User Privacy."

Georgia Institute of Technology Host: Alyssa Sheehan. 07/21.

"Privacy for the People."

Teaching

College of Computing, Georgia Institute of Technology

TA, Human-Computer Interaction. Fall 2023.

Co-Instructor, Usable Privacy and Security. Spring 2023.

TA, Computing, Society, and Professionalism. Fall 2022.

TA, User Interface Design. Summer 2021.

Harris School of Public Policy, University of Chicago

TA, Data Skills for Public Policy (R). Winter 2018.

TA, Introduction to Programming for Public Policy (Python). Fall 2017.

Grants

ACM FACCT Travel Grant (\$1400). June 2023.

IEEE S&P Student Travel Grant (\$1300). May 2022.

Georgia Institute of Technology GVU Center *Travel Grant* (\$300). May 2022.

Service

Program Committee

USEC '24-'25, CSCW Posters '24, CHI '25, CCS '25

Reviewer

CSCW '22 & '24, CHI '21-'24*, CHI LBW '22, DIS '21 & '24, IEEE S&P Magazine *Special Recognitions for Outstanding Reviews

Student Volunteer

CHI '22, IEEE S&P '22

PhD Recruiting and Outreach

Panelist, Current PhD Students in Interactive Computing, '20, '23, '24

Panelist and Member, Graduate Women in College of Computing, '19-'24

Student Reviewer, Georgia Tech School of Interactive Computing PhD Admissions, '24

Additional

Democratic National Committee Mobilization Analytics Manager. 2018 to 2019.

Experience

Led Mobilization data team during 2018 midterm elections. Oversaw data warehouse migration from Vertica to BigQuery. Designed behavioral experiments for grassroots fundraising and voter outreach. Modeled donor engagement and prospects. Created, maintained, and overhauled reporting pipelines for the DNC and outside vendors.

Dept. of Computer Science, University of Chicago *Research Assistant.* 2017 to 2018. Worked with Prof. Blase Ur to research user misconceptions about private browsing.

Urban Center for Computation and Data *Research Assistant.* Summer 2017. Performed time series analyses and density-based clustering of Chicago crime data.

Skills

Programming/Technical. Python (including Pandas, PyTorch, Scikit-learn, statsmodels), SQL, Google BigQuery, R (tidyverse), Stata, HTML/CSS, ŁTĘX

Research. Survey and questionnaire instrument design, qualitative data analysis, quantitative data analysis, interviewing, discussion moderation, design fiction, storyboarding