Warda Usman

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EDUCATION

PhD in Computer Science, *Brigham Young University*   09/20 - 06/25
Specialization: ***Human-computer interaction, human factors in computing, UXR***
GPA: 3.87

MS in Computer Science, *Brigham Young University*   04/23
Thesis: "I think they're poisoning my mind: Understanding user rationales and mental models for adopting secure email"
GPA: 3.99

BS in Computer and Information Sciences, *Pakistan Institute of Engineering and Applied Sciences*   06/19

WORK EXPERIENCE

UX Research Lead, Security Operations Team, *Walmart Inc.*   01/21- Present
- Drove product improvements by synthesizing findings from interviews, surveys, and usability studies into clear, actionable recommendations for enterprise security products
- Partnered with product and policy teams to assess the effectiveness of enterprise security education programs, translating complex behavioral insights into design and process recommendations

Graduate Research Assistant, *Social Technology Lab - BYU*   01/21- Present
- Designed and ran several interview studies, surveys, and usability tests, resulting in actionable design improvements
- Led user research exploring adoption barriers for secure communication platforms, focusing on professional and privacy-conscious users
- Conducted mixed-methods studies to understand complex decision-making and workflows among technically sophisticated participants
- Independently led all projects, covering everything from recruiting participants, collecting data, analyzing data, finding actionable design insights, and writing reports

CS DEI Lead, *BYU CS Office of Diversity, Equity, and Inclusion*   01/21-Present
- Interviewed students from historically underrepresented groups in Computer Science to elicit their needs in the department for better support
- Improved departmental diversity initiatives leading to a 17% increase in female graduate enrollment and improved department support for underrepresented group

PEER-REVIEWED PUBLICATIONS

- **W. Usman**, J. Sadik, Taha, R. Elgedawy, S. Ruoti, D. Zappala, Security and Privacy Experiences of First- and Second-Generation Pakistani Immigrants to the US: Perceptions, Practices, Challenges, and Parent-Child Dynamics. *Accepted to IEEE Symposium on Security and Privacy (IEEES&P), 2025,* (14% acceptance rate)

- **W. Usman**, D. Zappala, SoK: A Framework and Guide for Human-Centered Threat Modeling in Security and Privacy Research. *Accepted to IEEE Symposium on Security and Privacy (IEEES&P), 2025,* (14% acceptance rate)

- **W. Usman**, J. Hu, M. Wilson, D. Zappala, [Distrust of Big Tech and a Desire for Privacy: Understanding the Motivations of People Who Have Voluntarily Adopted Secure Email](#) *USENIX Symposium on Usable Privacy and Security (SOUPS) 2023* (22% acceptance rate)

RESEARCH PROJECTS

Understanding Teenagers' Experiences with CyberBullying: A Content-Analysis and Survey Study
- Conducted and collected safety advice for teenagers on cyberbullying through structured queries and manual searches on tiktok and google
- Ran a comparison study to understand how the advice compares to expert opinions
- Designed and analyzed a survey to capture the actionability and effectiveness of the advice for teenagers

Investigating AI Manipulation in Teens: A Mixed-Methods Study
- Designed a 40-minute exploratory interview to understand teens' current practices and attitudes toward AI manipulation, followed by a 15-minute quantitative experiment analyzing user behavior and responses to AI-driven design suggestions

Exploring User Adoption and Barriers to Secure Email Systems: A Semi-Structured Interview Study
- Led a semi-structured interview study on the adoption and use of end-to-end encrypted email systems
- Analyzed user motivations, including privacy concerns, and identified barriers to regular use
- Delivered actionable insights to enhance usability and drive broader adoption of secure email

Security and Privacy Experiences of First- and Second-Generation Pakistani Immigrants to the US: Perceptions, Practices, Challenges, and Parent-Child Dynamics
- Conducted a qualitative interview study exploring the security and privacy experiences of first- and second-generation Pakistani immigrants to the US
- Analyzed participants' reflections on privacy challenges, and explored how cultural and generational differences impact their social media use
- Designed recommendations to improve social media platforms for better support of segmented content sharing

TEACHING EXPERIENCE

Adjunct Professor, *Brigham Young University*   01/24-04/24
- Taught and co-developed CS256 - Introduction to Human-Computer Interaction

Teaching Assistant, *Brigham Young University*
- CS465 - Computer security   Fall 2023
- CS110 - How to program   Winter 2022, 2023
- CS260 - Web programming   Winter 2023

SKILLS

Python, JMP (statistical analysis software), R, SQL, Tableau, focus groups, concept testing, usability testing, survey design, qualitative data analysis (nvivo, dedoose, dovetail, MaxQDA), interviewing, ethnography research synthesis, cultural competency, thematic analysis, affinity mapping, A/B testing, contextual inquiry, journey mapping, heuristic evaluation