HANA T. HABIB

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RESEARCH AREA

Societal Computing; Privacy & Security; Human-Computer Interaction (HCI)

WORK EXPERIENCE
July 2024 – Present

Software and Societal Systems Department, Pittsburgh, PA
Assistant Teaching Professor

Dec. 2022 – Present

CMU Privacy Engineering Masters Program, Pittsburgh, PA
Associate Director & Special Faculty Instructor
- Teaching core courses in the MSIT-Privacy Engineering program, including Engineering Privacy in Software (17735), Information Security, Privacy, and Policy (17631), Privacy by Design Project Workshop (17606), and Current Topics in Privacy Seminar (17702)
- Teaching modules in the Privacy Engineering certificate program
- Advising capstone project teams and masters students in the program
- Helping with other program administration activities, such as recruiting capstone sponsors, admissions, and student recruitment
- Collaborating in research efforts with other CMU faculty

Jan. 2022 – Dec. 2023

The Collaboratory Against Hate, Pittsburgh, PA
Postdoctoral Researcher
- Conducting a user study to explore the effectiveness of design interventions for promoting civil discourse on online platforms
- Conducted a user study to explore perceptions of fact-checking entities for preventing the spread of online misinformation through online platforms
- Co-organized a Fall 2022 workshop for discussing areas of needed research based on developed whitepaper
- Co-organized a poster session at the Eradicate Hate Summit 2022
- Co-authored whitepaper communicating research needs in the space of hate & extremism

Aug. 2016 – Sept. 2021

CMU CyLab Usable Privacy & Security Lab, Pittsburgh, PA
Graduate Research Assistant
- Developed user study protocols to investigate research questions in the space of usable privacy and security
- Utilized quantitative and qualitative methods to analyze data collected from user studies
- Served as a Teaching Assistant during the Fall 2016 semester for Privacy Policy, Law, and Technology, a cross-discipline graduate level course
- Served as a Teaching Assistant during the Spring 2019 semester for Usable Privacy and Security, a research methods focused graduate level course

May 2018 – Aug. 2018

Snap Inc., Los Angeles, CA
Research Intern
- Designed and conducted a user study to better understand the role of context on public sharing decisions of Snapchat users

- Communicated study findings to stakeholders within the company to inform future product development
- Collaborated with Marketing, Privacy Engineering, and Legal teams to help establish organizational processes for conducting HCI research

May 2015 – Aug. 2015   **Apple Inc., Cupertino, CA**
Privacy Engineering Intern
- Collaborated with teams cross-functionally to ensure privacy-protective feature designs for new and existing Apple products
- Developed tools to automate recurring Privacy Engineering tasks
- Analyzed data to better understand customer privacy needs
- Created awareness of privacy-related technology challenges within Apple and proposed novel solutions

June 2013 – July 2016   **National Security Agency (NSA), Fort George G. Meade, MD**
Software Engineer, Product Source Node Development Branch
- Implemented generation of additional cryptographic products by a Key Management Infrastructure (KMI)
- Managed team's work items to ensure progress towards program goals
- Provided updates to system components to integrate new KMI capabilities
- Virtualized system components for use in the development environment

PUBLICATIONS

Xiaoyuan Wu, Lydia Hu, Eric Zeng, **Hana Habib**, Lujo Bauer. "Transparency or Information Overload? Evaluating Users' Comprehension and Perceptions of the iOS App Privacy Report." *In Proceedings of the Network and Distributed System Security (NDSS) Symposium*. 2025.

Hana Habib, Sara Elsharawy, and Rifat Rahman. "'I don't trust them': Exploring Perceptions of Fact-checking Entities for Flagging Online Misinformation." *Technical Report, The Collaboratory Against Hate*. 2024.

Elijah Robert Bouma-Sims, Megan Li, Yanzi Lin, Adia Sakura-Lemessy, Alexandra Nisenoff, Ellie Young, Eleanor Birrell, Lorrie Faith Cranor, **Hana Habib**. "A US-UK Usability Evaluation of Consent Management Platform Cookie Consent Interface Design on Desktop and Mobile." *In Proceedings of the Conference on Human Factors in Computing Systems (CHI).* 2023.

Jane Im, Ruiyi Wang, Weikun Lyu, Nick Cook, **Hana Habib**, Lorrie Faith Cranor, Nikola Banovic, Florian Schaub. "Less is Not More: Improving Findability and Actionability of Privacy Controls for Online Behavioral Advertising." *In Proceedings of the Conference on Human Factors in Computing Systems (CHI).* 2023.

Verena Distler, Matthias Fassl, **Hana Habib**, Katharina Krombholz, Gabriele Lenzini, Carine Lallemand, Vincent Koenig, and Lorrie Faith Cranor. "Empirical Research Methods in Usable Privacy and Security." *Human Factors in Privacy Research,* 29-53, 2023.

Lorrie Faith Cranor and **Hana Habib**. "Metrics for Success: Why and How to Evaluate Privacy Choice Usability." *Communications of the ACM,* 66(3), 35-37, 2023.

Michael Miller Yoder and **Hana Habib**. "Research Needs for Countering Extremist Hate." Technical Report, *The Collaboratory Against Hate.* 2022.

Hana Habib and Lorrie Faith Cranor. "Evaluating the Usability of Privacy Choice Mechanisms." *In Proceedings of the Symposium on Usable Privacy and Security (SOUPS).* 2022.

Hana Habib, Sarah Pearman, Ellie Young, Lorrie Faith Cranor. "Identifying User Needs for Advertising Controls on Facebook." *In Proceedings of the Conference on Computer-Supported Cooperative Work And Social Computing (CSCW).* 2022.

Hana Habib, Megan Li, Ellie Young, Lorrie Faith Cranor. "'Okay, whatever': An Evaluation of Cookie Consent Interfaces." *In Proceedings of the Conference on Human Factors in Computing Systems (CHI).* 2022.

Verena Distler, Matthias Fassl, **Hana Habib**, Katharina Krombholz, Gabriele Lenzini, Carine Lallemand, Lorrie Cranor, Vincent Koenig. "A Systematic Literature Review of Empirical Methods and Risk Representation in Usable Privacy and Security Research." *Transactions on Computer-Human Interaction (ToCHI).* 2021.

Hana Habib, Yixin Zou, Yaxing Yao, Alessandro Acquisti, Lorrie Faith Cranor, Joel Reidenberg, Norman Sadeh, Florian Schaub. "Toggles, Dollar Signs, and Triangles: How to (In)Effectively Convey Privacy Choices with Icons and Link Texts." *In Proceedings of the Conference on Human Factors in Computing Systems (CHI).* 2021.

Hana Habib, Sarah Pearman, Jiamin Wang, Yixin Zou, Alessandro Acquisti, Lorrie Faith Cranor, Norman Sadeh, Florian Schaub. "`It's a scavenger hunt': Usability of Websites' Opt-Out and Data Deletion Choices." *In Proceedings of the Conference on Human Factors in Computing Systems (CHI).* 2020.

Vinayshekhar Bannihatti Kumar, Roger Iyengar, Namita Nisal, Yuanyuan Feng, **Hana Habib**, Peter Story, Sushain Cherivirala, Margaret Hagan, Lorrie Faith Cranor, Shomir Wilson, Florian Schaub, Norman Sadeh. "Finding a Choice in a Haystack: Automatic Extraction of Opt-Out Statements from Privacy Policy Text." *In Proceedings of the Web Conference (the Web Conf).* 2020.

Hana Habib, Yixin Zou, Aditi Jannu, Neha Sridhar, Chelse, Swoopes, Alessandro Acquisti, Lorrie Faith Cranor, Norman Sadeh, Floriean Schaub. "An Empirical Analysis of Data Deletion and Opt-Out Choices on 150 Websites." *In Proceedings of the Symposium on Usable Privacy and Security (SOUPS).* 2019.

Hana Habib, Neil Shah, and Rajan Vaish. "Impact of Contextual Factors on

Snapchat Public Sharing." *In Proceedings of the Conference on Human Factors in Computing Systems (CHI)*. 2019. **Best Paper Honorable Mention award.**

Hana Habib, Jessica Colnago, Vidya Gopalakrishnan, Sarah Pearman, Jeremy Thomas, Alessandro Acquisti, Nicolas Christin, and Lorrie Faith Cranor. "Away From Prying Eyes: Analyzing Usage and Understanding of Private Browsing." *In Proceedings of the Symposium on Usable Privacy and Security (SOUPS)*. 2018.

Hana Habib, Pardis Emami Naeini, Summer Devlin, Maggie Oates, Chelse Swoopes, Lujo Bauer, Nicolas Christin, and Lorrie Faith Cranor. "User Behaviors and Attitudes Under Password Expiration Policies." *In Proceedings of the Symposium on Usable Privacy and Security (SOUPS)*. 2018.

Hana Habib, Jessica Colnago, William Melicher, Blase Ur, Sean Segreti, Lujo Bauer, Nicolas Christin, and Lorrie Faith Cranor. "Password Creation in the Presence of Blacklists." *In Proceedings of the Workshop on Usable Security (USEC)*. 2017.

Sarah Pearman, Jeremy Thomas, Pardis Emami Naeini, **Hana Habib**, Lujo Bauer, Nicolas Christin, Lorrie Faith Cranor, Serge Egelman, and Alain Forget. "Let's go in for a closer look: Observing passwords in their natural habitat." *In Proceedings of the Conference on Computer and Communications Security (CCS)*. 2017.

Pardis Emami Naeini, Sruti Bhagavatula, **Hana Habib**, Martin Degeling, Lujo Bauer, Lorrie Cranor, Norman Sadeh. "Privacy Expectations and Preferences in an IoT World." *In Proceedings of the Symposium on Usable Privacy and Security (SOUPS)*. 2017.

Blase Ur, Felicia Alfieri, Maung Aung, Lujo Bauer, Nicolas Christin, Jessica Colnago, Lorrie Faith Cranor, Henry Dixon, Pardis Emami Naeini, **Hana Habib**, Noah Johnson, and William Melicher. "Design and Evaluation of a Data-Driven Password Meter." *In Proceedings of the Conference on Human Factors in Computing Systems (CHI)*. 2017. **Best Paper Award.**

Joshua Gluck, Florian Schaub, Amy Friedman, **Hana Habib**, Norman Sadeh, Lorrie Faith Cranor, and Yuvraj Agarwal. "How Short Is Too Short? Implications of Length and Framing on the Effectiveness of Privacy Notices." *In Proceedings of the Symposium on Usable Privacy and Security (SOUPS).* 2016.

Manya Sleeper, William Melicher, **Hana Habib**, Lujo Bauer, Lorrie Faith Cranor, and Michelle L. Mazurek. "Sharing personal content online: Exploring channel choice and multi-channel behaviors." *In Proceedings of the Conference on Human Factors in Computing Systems (CHI)*. 2016.

Hana Qudsi and Maneesh Gupta. "Low-Cost, Thermistor Based Respiration Monitor.*" In Proceedings of the Southern Biomedical Engineering Conference (SBEC)*. 2013.

EDUCATION	**Carnegie Mellon University, School of Computer Science, Pittsburgh, PA** *Ph.D in Societal Computing* Graduated September 2021

Dissertation: Evaluating the Usability of Privacy Choice Mechanisms

Carnegie Mellon University, Pittsburgh, PA · Mountain View, CA
M.S. Information Technology-Information Security
Graduated December 2015

Cornell University, College of Engineering, Ithaca, NY
B.S. Independent Major-Computer Science, Electrical and Computer Engineering
Graduated May 2013

SCHOLARSHIPS AND AWARDS

- Awarded a $50,000 research grant from Facebook
- Participant in the 2019 Rising Stars Workshop
- Participant in the 2017/2018 Privacy Scholars Fellowship Program
- Recipient of the 2017/2018 and 2019/2020 CyLab Presidential Fellowship
- Recipient of the 2014 Executive Women's Forum Fellowship
- Graduate of NSA's Stokes Educational Scholarship Program

SERVICE

- Conf. on Computer and Communications Security (CCS) PC (2025)
- Workshop on Usable Security and Privacy (USEC) PC (2023-2025)
- Conf. on Privacy Engineering Practice and Respect (PEPR) PC (2023-2025)
- European Symposium on Usable Security (EuroUSEC) PC (2023)
- Who Are You!? Adventures in Authentication (WAY) PC (2019)
- PhD Women@SCS Board (2019)
- Graduate Student Assembly (2019)
- OurCS Conference Committee (2019)
- OurCS Facilitator (2017, 2019)
- INI Alumni Leadership Council Member (2018-2021)

CERTIFICATIONS AND SKILLS

- IAPP Certified Information Privacy Technologist (CIPT)
- *Frameworks & Tools*: MySQL, Git, Subversion, IBM SPSS, R
- *Programming Languages*: Java, Python, C, C++, PHP, JavaScript