Jacob Abbott, Ph.D.

Usability Researcher

PROFILE

I am a usability researcher with 7+ years of experience conducting all phases of user research—protocol design, participant recruitment, data analysis, evaluation, and report/publication.

I combine both qualitative and quantitative data methods, design-based inquiries, and humanistic approaches to turn large-scale and ambiguous questions into design implications that drive change in policies and products.

SKILLS

User Research

Survey, interview, co-design, usability, card sorting, cognitive walkthroughs, field studies, content analysis, grounded theory, literature review, data analysis, R, contextual inquiry, material probe, cognitive mapping, ethnography, log analysis, time series, diary studies

Design Strategy

Competitive analysis, trend study, service blueprint, behavior persona, customer journey map, process mapping

Product Design

Ideation, sketching, wireframing, prototyping, accessibility testing

Project Management

Intercultural Communication, International Relations, Project Planning, Agile Development, Change Management, Adaptive

Language

English, German, Spanish

www.jacobeabbott.com jaeabbot@indiana.edu www.linkedin.com/in/jacob-abbott-74b33b14/

EXPERIENCE

Indiana University, Postdoctoral Fellow

Jan '23 – Present | Bloomington, IN

- Conducted analysis on representative sampling of U.S. population willingness to share info and privacy concerns regarding data with third parties.
- Oversaw 9 undergraduate and mentored 5 PhD students on individual and group projects.

Indiana University, Adjunct Lecturer

Aug '22 – Dec '22 | Bloomington, IN | School of Informatics, Computing, and Engineering

- Taught "Legal and Social Informatics of Security" course which introduced students to GDPR, HIPPA, COPPA, and other regulations.
- Mentored students through planning, conducting, and reporting group research projects.

Bank of America, IT Security Specialist

Jun '22 – Aug '22 | Charlotte, NC

- Conducted 20 in-depth qualitative interviews into behaviors of employees interacting with phishing emails.
- Focused on determine why some employees clicked on multiple phishing emails to help identify appropriate interventions and future prevention measures.

Indiana University, Doctoral Research Assistant

Aug '16 – Jun '22 | Bloomington, IN | School of Informatics, Computing, and Engineering

- Project Lead in capstone for NSF, "SaTC Large: Living in the Internet of Things", CNS 1565375 2016-2021, \$2.99M working with faculty at three universities & two postdocs.
- Mentored over a dozen graduate and undergraduate students and collaborated with PhD students across departments to integrate five years of applied research into a single capstone field deployment in-home IoT experiment.

DarkOwl LLC, Development Team Intern

May '19 – Aug '19 | Denver, Colorado

• Created scripts to automate analysis of query results and generate graphical outputs of data to present to users.

CSIRO Data61, Visiting Scientist

May '18 – Aug '18 | Melbourne, Australia

- Organized and analyzed large scale dataset of 1.3 billion email and password combos for impact of social identity on password formation.
- Presented scientific findings at universities, primary schools, and public events for those interested in science.

NeuroCrypt LLC, Project Lead

Aug 2015 – Jul 2016 | Bloomington, Indiana

- Collaborated closely with lead developer, engineer, and founder in design and implementation of systems and ensured documentation and milestone completion.
- Created and maintained repository of company's digital assets and took over all aspects of HR and accounting.

Indiana University, Research Assistant & Lab Manager

Feb '14 – May '15 | Bloomington, IN | School of Informatics, Computing, and Engineering

- Mentored 4 undergraduate interns and took on duties of lab manager during the summer to organize meetings and project timelines.
- Conducted a reading group to discuss new methodologies and interesting projects.
- Assisted in multiple interdisciplinary experiments and analyzed data using R.

AWARDS

Best Paper Honorable Mention

(top 5% of accepted papers)ACM CHI'22 & CHI'19

Service Awards

- Luddy Outstanding Service Award (2022)
- ACM CHI Student Volunteer Award – Best Catcher of Mistakes (2022)
- Excellence in Service Informatics Department (2022)

LEADERSHIP & SERVICES

Conference Associate Chairs

- ACM DIS'23 Papers & Pictorials
- ACM DIS'21 Papers & Pictorials

Conference Organizing Committee

• USEC 23 – Program Co-Chair

TEACHING

Student Mentorship

- Women in STEM Advanced Summer Research – 3 undergrad students (2023)
- Research mentor for Emerging Scholars Research Experience for Undergraduate Women (2019 - 2020)
- Undergraduate Research Opportunities in Computing; 5 undergrad students (2018 -2023)

Associate Instructor

- Organizational Informatics and Economics of Security
- Analytical Foundations of Security
- Introduction to Math of Cybersecurity
- Legal and Social Informatics of Security

RESEARCH PROPOSALS & AWARDS

Co-PI on award from the Cellular Telecommunications Industry Association (CTIA)

PI: L. Jean Camp Co-PI: Jacob Abbott

Funded: \$162,768

EDUCATION

Ph.D., Informatics (Security)

Aug '16 – Jun '22 | Indiana University, Bloomington, IN | GPA: 3.864

M.S., Security Informatics

Aug '13 – May '15 | Indiana University, Bloomington, IN |GPA: 3.623

B.A., Foreign Language and International Trade

Aug '05 – May '12 | Southern Illinois University, Carbondale, IL | GPA: 3.586 B.A., German Studies

Aug '05 – May '10 | Southern Illinois University, Carbondale, IL | GPA: 3.586

SELECTED PUBLICATIONS

Anne C. Tally, **Jacob Abbott**, Ashley M. Bochner, Sanchari Das, and Christena Nippert-Eng. "Tips, Tricks, and Training: Supporting Anti-Phishing Awareness among Mid-Career Office Workers Based on Employees' Current Practices." In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems, pp. 1-13. 2023.

Anne C. Tally, **Jacob Abbott**, Ashley Bochner, Sanchari Das, and Christena Nippert-Eng. "What Mid-Career Professionals Think, Know, and Feel About Phishing: Opportunities for University IT Departments to Better Empower Employees in Their Anti-Phishing Decisions." Proceedings of the ACM on Human-Computer Interaction 7, no. CSCW1 (2023): 1-27.

Jacob Abbott, Jayati Dev, Donginn Kim, Shakthidhar Gopavaram, Meera Iyer, Shivani Sadam, Shrirang Mare, Tatiana Ringenberg, Vafa Andalibi, and L. Jean Camp. "Kids, Cats, and Control: Designing Privacy and Security Dashboards for IoT Home Devices." In Proceedings of the Symposium on Usable Security and Privacy (USEC) 2023.

Jacob Abbott, Jayati Dev, Donginn Kim, Shakthidhar Gopavaram, Meera Iyer, Shivani Sadam, Shrirang Mare, Tatiana Ringenberg, Vafa Andalibi, and L. Jean Camp. "Privacy Lessons Learnt from Deploying an IoT Ecosystem in the Home." In Proceedings of the 2022 European Symposium on Usable Security, pp. 98-110. 2022.

Zitao Zhang, **Jacob Abbott**, Sanchari Das, and L. Jean Camp. "Building an authentication infrastructure—designing a two factor authentication hardware token with form factor that encourages engagement." TPRC 2022: The 50th Research Conference on Communication, Information and Internet Policy, SSRN, September 2022.

Jacob Abbott, Jofish Kaye, and James Clawson. "Identifying an aurally distinct phrase set for text entry techniques." In Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems, pp. 1-13. 2022. (Honorable Mention for Best Paper Award)

Jacob Abbott, and Sameer Patil. "How mandatory second factor affects the authentication user experience." In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems, pp. 1-13. 2020.

Marthie Grobler, M. A. P. Chamikara, **Jacob Abbott**, Jongkil Jay Jeong, Surya Nepal, and Cecile Paris. "The importance of social identity on password formulations." Personal and Ubiquitous Computing 25, no. 5 (2021): 813-827.

Sanchari Das, **Jacob Abbott**, Shakthidhar Gopavaram, Jim Blythe, and L. Jean Camp. "Usercentered risk communication for safer browsing." In Financial Cryptography and Data Security: FC 2020 International Workshops, AsiaUSEC, CoDeFi, VOTING, and WTSC, Kota Kinabalu, Malaysia, February 14, 2020, Revised Selected Papers 24, pp. 18-35. Springer International Publishing, 2020.

Jacob Abbott, Haley MacLeod, Novia Nurain, Gustave Ekobe, and Sameer Patil. "Local standards for anonymization practices in health, wellness, accessibility, and aging research at CHI." In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems, pp. 1-14. 2019. (Honorable Mention for Best Paper Award)

Jacob Abbott, Gege Gao, and Patrick Shih. "Creen: a carbon footprint calculator designed for calculation in context." In Information in Contemporary Society: 14th International Conference, iConference 2019, Washington, DC, USA, March 31–April 3, 2019, Proceedings 14, pp. 769-776. Springer International Publishing, 2019.