

KEVIN M. STORER

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SUMMARY

I use design-based and qualitative research methods to build and evaluate technologies for homes and families which support the autonomy and empowerment of disabled parents. My dissertation research explores how parents with visual impairments read with their children, to design interactive systems which increase parenting self-efficacy by making learning together more accessible and equitable—for everyone.

Themes: Accessibility, Parenting, Homes, Families, Autonomy, Self-Efficacy

Methods: Interviews, Observations, Focus Groups, Content Analysis, Field Deployments, Design

EDUCATION

- 2017- **Ph.D., Informatics** — University of California, Irvine
Dissertation Topic: *Designing Accessible Co-reading Technologies with Blind Parents*
Advised by **Stacy Branham**
- 2017 **M.S., Computer Science** — Clemson University
Concentration: *Interactive Computing Systems*
Thesis Title: *Nuanced Views of Pedagogical Evaluation*
Advised by **Jacob Sorber**
- 2015 **B.S., Computer Science** — Bowling Green State University
Minor: *Physical Sciences*
With Distinction

RESEARCH EXPERIENCE

- 2018- **University of California, Irvine** — Donald Bren School of Information & Computer Science
Research Assistant || Advisor: **Stacy Branham**
Leading research to design technologies which make shared book reading accessible, to support literacy and social-emotional learning for parents with difficulty reading English and their children.
- 2020 **Google** — Seattle, WA
UX Research Intern || Team: **Cloud UX Research** || Host: **Harini Sampath**
Conducted remote observations and interviews with software developers who use screen readers to understand how accessibility in technical documentation affects the development experience.
- 2019 **Google** — Mountain View, CA
UX Research Intern || Team: **Assistant UX Research** || Host: **Tejinder Judge**
Conducted a pair interview study of parents with and without visual impairments to understand how mixed-visual-ability families use voice assistants in their domestic lives.

- 2017-18 **University of California, Irvine** — Donald Bren School of Information & Computer Science
Research Assistant || Advisor: **Gloria Mark**
Conducted experimental research to understand how push notification patterns affect knowledge workers' sympathetic stress levels while multitasking in the workplace.
- 2015-17 **Clemson University** — School of Computing
Research Assistant || Advisor: **Jacob Sorber**
Conducted research to understand how evaluations of post-secondary Computer Science pedagogy are impacted by the significant underrepresentation of women in Computing.

PUBLICATIONS

Journal Articles

- [J.1] Abdolrahmani, A., **Storer, K.M.**, Mukkath Roy, A.R., Kuber, R., Branham, S.M. *Blind Leading the Sighted: Drawing Design Insights from Blind Users towards More Productivity-oriented Voice Interfaces*. Transactions on Accessible Computing (**TACCESS**). January 2020, Article 18, 35 pages.
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Conference Proceedings

- [C.6] **Storer K.M.**, Sampath H., Merrick M.A., *"It's Just Everything Outside of the IDE that's the Problem": Information Seeking by Software Developers with Visual Impairments*. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (**CHI '21**).
[Acceptance rate forthcoming]
- [C.5] **Storer K.M.**, Judge T.K., Branham S.M. *"All in the Same Boat": Tradeoffs of Voice Assistant Ownership for Mixed-Visual-Ability Families*. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (**CHI '20**).
[24% acceptance rate] — [Download](#) — [Presentation](#)
- [C.4] **Storer K.M.**, Branham S.M. *"That's the Way Sighted People Do It": What Blind Parents Can Teach Technology Designers About Co-Reading with Children*. In Proceedings of the ACM SIGCHI Conference on Designing Interactive Systems (**DIS '19**).
[25% acceptance rate, **Honorable Mention for Best Paper (Top 2%)**] — [Download](#)
- [C.3] ¹Akbar F., Bayraktaroglu A.E., Buddharaju P., Cunha D., Gao, G., Grover T., Gutierrez-Osuna R., Jones N.C., Mark G., Pavlidis I., **Storer K.**, Wang Z., Wesley A., & Zaman S. *Email Makes You Sweat: Examining Email Interruptions and Stress Using Thermal Imaging*. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (**CHI '19**).
[23.8% acceptance rate] — [Download](#)
- [C.2] Hester J., **Storer K.**, Sorber J. *Timely Execution on Intermittently Powered Batteryless Sensors*. In Proceedings of the ACM Conference on Embedded Network Sensor Systems (**SenSys '17**).
[17.2% acceptance rate] — [Download](#)

¹ Citation appears alphabetically, to denote equal contributions of all authors.

- [C.1] Hester J., Peters T., Yun T., Peterson R., Skinner J., Golla B., **Storer K.**, Hearndon S., Freeman K., Lord S., Halter R., Kotz D., Sorber J. *Amulet: An Energy-Efficient, Multi-Application Wearable Platform*. In Proceedings of the ACM Conference on Embedded Network Sensor Systems (**SensSys '16**). [17.6% acceptance rate] — [Download](#)

Refereed Workshop Proceedings

- [W.3] **Storer K.M.**, Branham S.M. *Reframing Homes and Families in Accessibility*. Nothing About Us Without Us: Investigating the Role of Critical Disability Studies in HCI, ACM SIGCHI Conference on Human Factors in Computing Systems (**CHI '20**).
[Download](#)
- [W.2] Furlong M., Hester J., **Storer K.**, Sorber J. *Realistic Simulation for Tiny Batteryless Sensors*. International Workshop on Energy Harvesting and Energy-Neutral Sensing Systems, ACM Conference on Embedded Network Sensor Systems (**SensSys '16**).
[Download](#)
- [W.1] Hester J., **Storer K.**, Sitanayah L., Sorber J. *Towards A Language and Runtime for Intermittently-Powered Devices*. Workshop on Hilariously Low-Power Computing, ACM International Conference on Architectural Support for Programming Languages and Operating Systems (**ASPLOS '16**).
[Non-Archival](#)

Research Posters and Demonstrations

- [P.2] Bi S., Davenport E., Gong J., Peterson R., Skinner J., **Storer K.**, Wang T., Caine K., Halter R., Kotz D., Odame K., Sorber J., Yang X. *Poster: Auracle: A Wearable Device for Detecting and Monitoring Eating Behavior*. In Proceedings of the 15th Annual International Conference on Mobile Systems, Applications, and Services (**MobiSys '17**).
[Download](#)
- [P.1] Hester J., Peters T., Yun T., Peterson R., Skinner J., Golla B., **Storer K.**, Hearndon S., Freeman K., Lord S., Halter R., Kotz D., Sorber J. *The Amulet Wearable Platform: Demo Abstract*. In Proceedings of the 14th ACM Conference on Embedded Network Sensor Systems (**SensSys '16**).
[Download](#)

TEACHING EXPERIENCE

- WQ'19 **Marginalized Digital Embodiments** — University of California, Irvine
Course: INF 299 || Instructor: **Stacy Branham**
Served as one of two organizers of a graduate-level, discussion-based course on interaction design for marginalized groups. Designed the course syllabus and led weekly discussions.
- SQ'18 **Interactive Technology** — University of California, Irvine
Course: INF 285 || Instructor: **Don Patterson**
Served as one of two teaching assistants for a course of 30+ Master's students, provided feedback on assignments, moderated discussions, and instructional programming sessions.

- WQ'18 **Project Management** — University of California, Irvine
 Course: **INF151** || Instructor: **Alexander Cho**
 Served as the teaching assistant for a course of 60+ Bachelor's students developed course materials, provided feedback on assignments, and held class lectures in the instructor's absence.
- FQ'17 **Project Management** — University of California, Irvine
 Course: **INF 151** || Instructor: **Gloria Mark**
 Served as the teaching assistant for a course of 150+ Bachelor's students, developed course materials, provided feedback on assignments, and held class lectures in the instructor's absence.
- FQ'15 **Computer Organization** — Clemson University
 Course: **CPSC 2310** || Instructor: **Rose Lowe**
 Served as one of two teaching assistants for a course of 100+ students, held lab sessions three times weekly, where I taught students to program in assembly language.

INVITED TALKS

- [IT.3] *"Accessibility of Technical Documentation."*
Google User Experience Research, Seattle, Washington. December 7, 2020.
- [IT.2] *"Non-Visual Accessibility in Technical Information Seeking."*
Google User Experience Research, Seattle, Washington. September 25, 2020.
- [IT.1] *"Understanding Voice Assistant Use in Mixed-Visual-Ability Families."*
Google User Experience Research, Mountain View, California. December 11, 2019.

GUEST LECTURES

- [GL.9] *"Pragmatism, Embodiment, and Experience."* — Fall 2018
INF295: Mobile Learning Technologies, UC Irvine. Taught by Kurt Squire.
- [GL.8] *"Agile Software Development."* — Winter 2018
INF151: IT Project Management, UC Irvine. Taught by Alex Cho.
- [GL.7] *"Time Management."* — Winter 2018
INF151: IT Project Management, UC Irvine. Taught by Alex Cho.
- [GL.6] *"Human Resource Management."* — Fall 2017
INF151: IT Project Management, UC Irvine. Taught by Gloria Mark.
- [GL.5] *"Teams and Conflict."* — Fall 2017
INF151: IT Project Management, UC Irvine. Taught by Gloria Mark.
- [GL.4] *"Developing Software for Error-Prone Devices."* — Fall 2016
CPSC4820: Embedded Systems, Clemson University. Taught by Jacob Sorber.
- [GL.3] *"Allocating and Managing Virtual Memory."* — Spring 2016
CPSC3220: Operating Systems, Clemson University. Taught by Jacob Sorber.

- [GL.2] *“Drag Performance and Gender Identity.”* — Spring 2015
PSYC3070: Human Sexuality, Bowling Green State University. Taught by Robert Kirk.
- [GL.1] *“Drag Performance and Gender Identity.”* — Spring 2014
PSYC3070: Human Sexuality, Bowling Green State University. Taught by Robert Kirk.

AWARDS, HONORS, AND SERVICE

- 2020 **Paper Session Co-Chair**, ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '20)
- 2020 **Volunteer**, Paper Accessibility Team w/ Accessibility Chairs Shari Trewin and Kyle Rector (CHI '20)
- 2020 **Reviewer**, ACM Conference on Human Factors in Computing (CHI '20)
- 2020 **Adult Literacy Instructor**, OC READ at the Orange County Public Library System
- 2019 **Adult Literacy Instructor**, City of Orange Public Library Foundation
- 2019 **Best Paper Honorable Mention**, ACM Conference on Designing Interactive Systems (DIS '19)
- 2019 **Fellow**, Bob and Barbara Kleist Endowed Graduate Fellowship (UC Irvine)
- 2019 **Fellow**, Graduate Assistance in Areas of National Need: Responsible AI (UC Irvine)
- 2019 **Reviewer**, Mind, Culture, and Activity: An International Journal (Taylor & Francis)
- 2019 **Volunteer**, SIGCHI Accessibility Issues to Support Inclusive Events (ACM)
- 2017 **Recipient**, Information & Computer Sciences Dean's Award (UC Irvine)
- 2016 **Reviewer**, Information Processing in Sensor Networks, Shadow TPC (ACM/IEEE)
- 2015 **Audience Choice**, School of Computing 3-Minute Thesis (Clemson University)