

KEVIN M. STORER

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RESEARCH STATEMENT

I use design-based and qualitative research methods to build and evaluate technologies for homes and families, which support the autonomy, empowerment, and quality of life of minoritized parents. Currently, I am examining the ways that parents with difficulty reading printed English—due to visual impairments, linguistic differences, or educational barriers—read with their children, to develop interactive systems which support parenting self-efficacy by making learning more accessible and equitable, *for everyone*.

Themes: Accessibility, Parenting, Homes, Families, Self-Efficacy, Social-Emotional Learning

Methods: Interviews, Content Analysis, Focus Groups, Field Deployments, Observations, Co-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

PROFESSIONAL EXPERIENCE

Academic Experience

- 2018- **University of California, Irvine** — Donald Bren School of I&CS
Research Assistant || Advised by **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.
- 2017-18 **University of California, Irvine** — Donald Bren School of I&CS
Research Assistant || Advised by **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 || Advised by **Jacob Sorber**
Conducted research to understand how evaluations of post-secondary Computer Science pedagogy are impacted by the significant underrepresentation of women in Computing.

Industrial Experience

- 2020 **Google** — Seattle, WA
UX Research Intern || Team: **GCloud UX Research** || Host: **Harini Sampath**
Examining the accessibility of software development tools and the use of screen readers in professional coding, to reduce access barriers for developers with visual impairments.
- 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.
- 2015 **Toledo Integrated Systems** — Holland, OH
Software Developer || Team: **System Controls**
Developed applications to assist electrical engineers in designing effective user interfaces for stamping press controls and more easily debug them in a manufacturing setting.
- 2014 **Marathon Petroleum Corporation** — Findlay, OH
Software Development Intern || Team: **Refining IT Development**
Developed a browser-based application using JavaScript, HTML, and CSS to aggregate and provide remote access to refinery condition logs, to monitor safety and compliance.

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, embodiment, and digital representations of marginalized groups. Designed the course syllabus and led weekly discussions, advised by Dr. Stacy Branham.
- 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 conducted weekly one-on-one instructional programming sessions to assist students in developing an online game.
- 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 from diverse degree programs, developed course materials, provided feedback on assignments, conducted exam review sessions, 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 from diverse degree programs, developed course materials, provided feedback on assignments, conducted exam review sessions, 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.

RESEARCH 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**).
[Download](#)

Conference Proceedings

- [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 Proceeding of the ACM SIGCHI Conference on Human Factors in Computing Systems (**CHI '20**).
[24% acceptance rate] — [Download](#)
- [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] Akbar F., Bayraktaroglu A.E., Buddhharaju 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](#)
- [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 (**SenSys '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](#)

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

- [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 (**Sensys '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 (**SenSys '16**).
[Download](#)

INVITED TALKS

- [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 **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)