

EDUCATION

- 2014 **Ph.D., Computer Science**, Center for Human-Computer Interaction, Virginia Tech
Title: Designing Technologies for Empathic Communication
Advisor: Steve Harrison
Committee: Christopher Hoadley, Fred Piercy, Dennis Kafura, Manuel Pérez-Quiñones
- 2007 **B.S., Computer Science**, minor in Mathematics, Virginia Tech

PROFESSIONAL EXPERIENCE

Academic Appointments

- 2015- **University of Maryland, Baltimore County** - Baltimore, MD
Department of Information Systems
Lecturer
- 2014-15 **University of Maryland, Baltimore County** - Baltimore, MD
Department of Information Systems
Postdoctoral Researcher
with Shaun Kane

Research Experience

- 2012 **Fuji Xerox Palo Alto Laboratory (FXPal)** - Palo Alto, CA
Research Intern
with Scott Carter
- 2010 **Intel Labs** - Portland, OR
Research Intern
with Tad Hirsch
- 2009 **Fuji Xerox Palo Alto Laboratory (FXPal)** - Palo Alto, CA
Research Intern
with Gene Golovchinsky, Scott Carter, Jacob Biehl

Industry Experience

- 2008 **Meridium, Inc.** - Roanoke, VA
Usability Engineer
- 2007 **Northrop Grumman** - Chantilly, VA
Software Engineer
- 2006-07 **IBM** - Raleigh, NC
Software Developer

RESEARCH GRANTS

- 2018-19 **\$84,540**, Maryland Industrial Partnerships (MIPS) and TRX Systems, Inc.
Smart Wayfinding and Navigation Using 5D Location
[PI, External]
- 2017-18 **\$356,657**, NSF CRI
Flexible UI Instrumentation for Ubiquitous and Immersive Computing Environments
[Senior Personnel, External]
- 2016-18 **\$190,000**, Toyota Engineering and Manufacturing North America (TEMA)
Hardware Design and Field Evaluation of an Ultra-Mobile Navigation Aid for Blind People
[Co-PI, External]
- 2016-17 **\$29,886**, UMBC CoEIT Strategic Plan Implementation Grant Program
Revitalizing the CoEIT User Studies Lab
[Co-PI, Internal]

AWARDS AND HONORS

- 2017 Nominated by Dean Keith Bowman, Outstanding First-Year Student Advocate award, one nominee per University
- 2015 Best Paper Award, CHI 2015
- 2012 Best Paper Award, DIS 2012
- 2013 Systems Grace Hopper Conference Travel Scholarship
- 2009-12 Clare Boothe Luce Graduate Research Fellowship, **\$40,000 / year**
- 2007 Grace Hopper Conference Travel Scholarship
- 2007 Senior Service Award, Department of Computer Science, Virginia Tech
- 2005/06 CAMEO Scholarship, **\$1,500 / year**

PUBLICATIONS¹

Journal Articles

- [J.4] Nathan, L., Thieme, A., Tatar, D., & **Branham, S.M.** Special Issue Editorial: Disruptions, Dilemmas & Paradoxes: Ethical Matter(s) in Design Research. *Interacting with Computers (IwC)*, 29(1), October 2016.
- [J.3] *Oh, U., **Branham, S.M.**, Findlater, L., Kane, S. "Audio-Based Feedback Techniques for Teaching Touchscreen Gestures." *In Transactions on Accessible Computing (TACCESS)*, 7(3), November 2015.
- [J.2] Carter, S., Adcock, J., Cooper, M., **Branham, S.M.** "Tools to support expository video capture and access." *In Education and Information Technologies Journal*, 19(3) September 2014.

¹ In my field, top-tier conference publications undergo a rigorous peer-review and revision process and are therefore highly valued. Author names are generally listed in order of descending effort towards writing and framing the scientific contribution, with those who funded and managed the work appearing last. Co-authors who were students at the time of publication are denoted by an asterisk (*).

- [J.1] McCrickard, D.S., Wahid, S., **Branham, S.M.**, Harrison, S. "Achieving both creativity and rationale: reuse in design with images and claims." *In Human Technology*, 7(1), May 2011.

Conference Papers

- [C.12] Hamidi, F., *Scheuerman, M., **Branham, S.M.** "Gender Recognition or Gender Reductionism? The Social Implications of Automatic Gender Recognition Systems." *In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '18)*, Montréal, Quebec, April 21-26, 2018. 10 pages. *forthcoming*
- [C.11] **Branham, S.M.**, *Abdolrahmani, A., *Easley, W., *Scheuerman, M., **Ronquillo, E., Hurst, A. "'Is Someone There? Do They Have a Gun?': How Visual Information About Others Can Improve Personal Safety Management for Blind Individuals." *In Proceedings of the ACM SIGACCESS Conference on Computers & Accessibility (ASSETS '17)*, Baltimore, MD, October 30 - November 1, 2017. 10 pages. (acceptance rate: 26%)
- [C.10] *Abdolrahmani, A., *Easley, W., Williams, M., **Branham, S.M.**, Hurst, A. "Embracing Errors: Examining How Context of Use Impacts Blind Individuals' Acceptance of Navigation Aid Errors." *In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '17)*, Denver, CO, May 6-11, 2017. 10 pages. (acceptance rate: 25%)
- [C.9] **Branham, S.M.**, Kane, S. "The Invisible Work of Accessibility: How Blind Employees Manage Accessibility in Mixed-Ability Workplaces." *In Proceedings of the ACM SIGACCESS Conference on Computers & Accessibility (ASSETS '15)*, Lisbon, Portugal, October 26-28, 2015. 9 pages. (acceptance rate: 24%)
- [C.8] **Branham, S.M.**, Kane, S. "Collaborative Accessibility: How Blind and Sighted Companions Co-Create Accessible Home Spaces." *In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '15)*, Seoul, Korea, April 18-23, 2015. 10 pages. (acceptance rate: 23%)
- [C.7] *Buehler, E., **Branham, S.M.**, *Ali, A., **Chang, J., **Hofmann, M., Hurst, A., Kane, S. "Sharing is Caring: Assistive Technology Designs on Thingiverse." *In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '15)*, Seoul, Korea, April 18-23, 2015. 10 pages. (acceptance rate: 23%, **Best Paper Award** - top 1%)
- [C.6] **Branham, S.M.**, Harrison, S.H., Hirsch, T. "Expanding the design space for intimacy: supporting mutual reflection for local partners." *In Proceedings of the Conference on Designing Interactive Systems (DIS '12)*, Newcastle, UK, June 2012, 4 pages. (acceptance rate: 20%) (**Best Paper Award**)
- [C.5] Lee, J.S., **Branham, S.M.** "Processlessness: staying open to interactional possibilities." *In Proceedings of the Conference on Designing Interactive Systems (DIS '12)*, Newcastle, UK, June 2012, 4 pages. (acceptance rate: 20%)
- [C.4] Carter, S., Adcock, J., Doherty, J., **Branham, S.M.** "NudgeCam: toward targeted, higher-quality media capture." *In Proceedings of the ACM Conference on Multimedia (MM '10)*, Firenze, Italy, October 2010, 4 pages. (acceptance rate: 18%)

- [C.3] Wahid, S., **Branham, S.M.**, McCrickard, D.S., Harrison, S. "Investigating the relationship between imagery and rationale in design." *In Proceedings of the Conference on Designing Interactive Systems (DIS '10)*, Aarhus, Denmark, August 2010, 10 pages. (acceptance rate: 15%)
- [C.2] **Branham, S.M.**, Golovchinsky, G., Carter, S., Biehl, J. "Let's go from the whiteboard: supporting transitions in work through whiteboard capture and reuse." *In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '10)*, Atlanta, Georgia, April 2010, 10 pages. (acceptance rate: 22%)
- [C.1] Wahid, S., **Branham, S.M.**, McCrickard, D.S., Harrison, S. "Picking up artifacts: storyboarding as a gateway to reuse." *In Proceedings of the Conference on Human-Computer Interaction (INTERACT '09)*, Uppsala, Sweden, September 2009, 14 pages. (acceptance rate: 27%)

Conference Workshops & Panels Organized

- [c.5] Metatla, O., Jouffrais, C., Bigham, J., **Branham, S.M.**, Serrano, M., Thieme, A., Kane, S., and Brulé, E. "Inclusive Educational Technologies: Emerging Opportunities for People with Visual Impairments." *In Extended Abstracts, ACM SIGCHI Conference on Human Factors in Computing Systems (CHI EA '18)*, Montréal, CA, April 21-26, 2018. *to appear*
- [c.4] Waycott, J., Munteanu, C., Davis, H., Thieme, A., Moncur, W., McNaney, R., Vines, J., **Branham, S.M.** "Ethical Encounters in Human-Computer Interaction." *In Extended Abstracts, ACM SIGCHI Conference on Human Factors in Computing Systems (CHI EA '16)*, San Jose, CA, May 7-12, 2016, 2016.
- [c.3] Waycott, J., Davis, H., Thieme, A., **Branham, S.M.**, Vines, J., Munteanu, C. "Ethical Encounters in HCI: Research in Sensitive Settings." *In Extended Abstracts, ACM SIGCHI Conference on Human Factors in Computing Systems (CHI EA '15)*, Seoul, Korea, April 18-23, 2015.
- [c.2] **Branham, S.M.**, Harrison, S., Tatar, D., Nathan, L., Olivier, P., Thieme, A. "Co-creating and Identity-Making in CSCW: Revisiting Ethics in Design Research." *In the Companion of the ACM Conference on Computer Supported Cooperative Work (CSCW Companion '14)*, Baltimore, MD, February 15-19, 2014.
- [c.1] **Branham, S.M.**, Vega, L.C. "Time strikes, we strike back: time management for female computer scientists." *Birds of a Feather panel, Grace Hopper Celebration for Women in Computing (GHC '11)*, Portland, OR, November 2011.

Conference Workshop & Poster Papers - Lightly Reviewed

- [c-lr.9] *Scheuerman, M., *Easley, W., *Abdolrahmani, A., Hurst, A., **Branham, S.M.** "Learning the Language: The Importance of Studying Written Directions in Designing Navigational Technologies for the Blind." *In Extended Abstracts, ACM SIGCHI Conference on Human Factors in Computing Systems (CHI EA '17)*, Denver, CO, May 6-11, 2017. 7 pages.

- [c-lr.8] *Abdolrahmani, A., *Easley, W., Williams, M., **Ronquillo, E., **Branham, S.M.**, Chen, T., Hurst, A. "Not All Errors are Created Equal: Factors that Impact Acceptance of an Indoor Navigation Aid for the Blind." In *Extended Abstracts, ACM SIGACCESS Conference on Computers & Accessibility (ASSETS EA '16)*, Reno, NV, Oct 24-26, 2016. 2 pages.
- [c-lr.7] *Easley, W., Williams, M., *Abdolrahmani, A., **Galbraith, C., **Branham, S.M.**, Hurst, A., Kane, S. "Let's Get Lost: Exploring Social Norms In Predominately Blind Environments." In *Extended Abstracts, ACM SIGCHI Conference on Human Factors in Computing Systems (CHI EA '16)*, San Jose, CA, May 7-12, 2016. 8 pages.
- [c-lr.6] **Branham, S.M.**, Carter, S. "Who makes, shares Internet how-to videos?" *Workshop on Social Mobile Video and Panoramic Video*, Stanford, CA, September 2012, 2 pages.
- [c-lr.5] **Branham, S.M.** "Couplehood as culture: exploring intimate couples through a domestic media space." In *Workshop on Connecting Families: New Technologies, Family Communication, and the Impact on Domestic Space (GROUP '10)*, Sanibel Island, FL, November 2010, 4 pages.
- [c-lr.4] **Branham, S.M.** "Picturestorming: ideation via 'bits of life.'" In *Workshop on Artifacts in Design: Representation, Ideation, and Process (CHI '10)*, Atlanta, GA, June 2010, 4 pages.
- [c-lr.3] **Branham, S.M.**, Wahid, S., McCrickard, D.S., Harrison, S. "A narrative on collaborative storyboarding." *Poster Paper, ACM Conference on Computer Supported Cooperative Work (CSCW '08)*, San Diego, CA, November 2008, 2 pages.
- [c-lr.2] McCrickard, D.S., Harrison, S., Wahid, S., **Branham, S.M.** "Putting creativity first—inspiring with image-based design rationale." In *Workshop on Creativity and Rationale in Software Design*, University Park, PA, June 2008, 7 pages.
- [c-lr.1] **Branham, S.M.**, Wahid, S., and McCrickard, D.S. "Channeling creativity: using storyboards and claims to encourage collaborative design." In *Workshop on Tools in Support of Creative Collaboration (Ce3C '07)*, Washington DC, June 2007, 4 pages.

Book Chapters

- [BC.1] **Branham, S.M.**, Harrison, S. "Designing for collocated couples." In: Neustaedter, C., Harrison, S., and Sellen, A., eds. *Connecting families: the impact of new communication technologies on domestic life*. Springer, 2013.

INVITED TALKS

- [IT.14] From Independence to Interdependence: A social narrative of assistive technology. DUB Seminar, University of Washington. December 7, 2017. *schedule*
- [IT.13] From Independence to Interdependence: A social narrative of assistive technology. CS Grad Seminar, Virginia Tech. November 17, 2017.
- [IT.12] From Independence to Interdependence: A social narrative of assistive technology. HCIL BBL, University of Maryland, College Park. September 14, 2017.
- [IT.11] Response to Daniela Rosner's "Critical Fabulations." HCIC, Watsonville, CA. June 28, 2017.

- [IT.10] Mediated Marginality: How IT marginalizes and empowers in interpersonal relationships. Guest Lecture, MCS 101 taught by Kristen Anchor. UMBC, Baltimore, MD. March 28, 2017 and March 29, 2017.
- [IT.9] Mediated Marginality: How IT marginalizes and empowers in interpersonal relationships. Guest Lecture, MCS 101 taught by Kristen Anchor. UMBC, Baltimore, MD. March 28, 2017 and March 29, 2017.
- [IT.8] Technology and Relationships: How IT design can change society. Guest Lecture, HCC 629 taught by Ravi Kuber. UMBC, Baltimore, MD. December 1, 2014.
- [IT.7] Technology and Relationships: How IT design can change society. Towson University, Towson, MD. November 11, 2014.
- [IT.6] Technology and Relationships: How IT design can change society. IS 803 taught by Anita Komlodi. UMBC, Baltimore, MD. October 17, 2014.
- [IT.5] Empathic Communication Technologies. TEDxUMBC. Catonsville, MD. September 13, 2014.
- [IT.4] Design cultures in computer science. Guest lecture, Design Cultures taught by Matthew Wisnioski. Virginia Tech, Blacksburg, VA. March 13, 2012.
- [IT.3] Couplehood as culture: exploring intimate couples through a domestic media space. Center for HCI at Virginia Tech, Blacksburg, VA. November 12, 2010.
- [IT.2] Let's go *from* the whiteboard. FXPal internal talk. Palo Alto, CA. July 29, 2009.
- [IT.1] Virginia Tech's AWC: students helping students. STARS Conference, Auburn, AL. August 11, 2008.

TEACHING EXPERIENCE

Courses Taught

University of Maryland, Baltimore County

Sp 2018	Instructor	HCC 728	Online Communities
	Instructor	IS 300	Management Information Systems
Fa 2017	Instructor	COMP 101	Computational Thinking and Design
	Instructor	COMP 101	Computational Thinking and Design
	Instructor	COMP 101	Computational Thinking and Design
Sp 2017	Instructor	HCC 629	Introduction to Human-Centered Computing
	Instructor	IS 300	Management Information Systems
Fa 2016	Instructor	COMP 101	Computational Thinking and Design
	Instructor	COMP 101	Computational Thinking and Design
	Instructor	COMP 101	Computational Thinking and Design
Sp 2016	<On Leave>		
Fa 2015	Instructor	COMP 101	Computational Thinking and Design
	Instructor	COMP 101	Computational Thinking and Design
	Instructor	COMP 101	Computational Thinking and Design
Sp 2015	HCC 629	Introduction to Human-Centered Computing	

Virginia Tech

Fa 2008	Instructor	CS 1705	Introduction to Object-Oriented Development
Sp 2008	Grad. TA	CS 1705	Introduction to Object-Oriented Development
Fa 2007	Grad. TA	CS 1705	Introduction to Object-Oriented Development
Fa 2006	Undergrad. TA	CS 1044	Introduction to Programming in C++
Fa 2005	Undergrad. TA	CS 1044	Introduction to Programming in C++

Student Supervision

Master's Thesis Advising

2016- Morgan Scheuerman (Chair)

Undergraduate Research Advising

2016-	Ghayas Akbar	2015-16	Niara Comrie
2015-17	Erick Ronquillo	2015-16	Braxton Dubin
2015-16	Liz Saloka		

Undergraduate Independent Study Advising

2017	Nour Zeinab	2016	Maya Gupta
2017	Sarah Alvarez	2016	Michelle Jung
2017	Emily Rivera	2016	Yasmin Majali
2017	Zoya Trendifilova	2016	Steven Herrera

SERVICE²

Professional Service

Conference Organizing Committee Member

2018	Associate Chair, Papers, ASSETS
2018	Associate Chair, Papers, CHI
2018	Co-Chair, Local Arrangements, SIGCSE
2017	Co-Chair, Student Research Competition, ASSETS

Conference Program Committee Associate Chair

2011/12 Associate Chair, Works-in-Progress, CHI

Journal Reviewer

2015	Interacting with Computers
2013	Transactions on Affective Computing

Guest Editor

2015	Interacting with Computers, Special Issue on <i>Ethics Matter(s) in Design Research</i>
2012-13	Systems Blog

² Service related to conference organizing and reviewing is dated in the year the conference was held.

Conference Reviewer

2010-18 CHI
2014,16 CSCW
2012,16 DIS
2013,15 Mobile HCI
2015 GI
2013 RO-MAN

Scholarship Reviewer

2017 NCWIT Aspirations in Computing
2012-14 ACM Richard Tapia Conference Scholarship

Departmental Service

2015- Facilities Manager, Interactive Systems Research Center
2015- Member, Undergraduate Studies Committee
2015- Academic Advisor (~100 undergraduate students)
2008-09 Webmaster, Association for Women in Computing (Virginia Tech)
2005-08 President, Association for Women in Computing (Virginia Tech)
2008 Member, Diversity Committee (Virginia Tech)

College Service

2016- Member, Center for Women in Technology Advisory Board
2017 Reviewer, CWIT Scholars Selection Day

University Service

2017- Member, Classrooms Committee
2017- Organizer, NCWIT Aspirations in Computing, Maryland Affiliate
2016- Member, Women's Center Advisory Board
2016-17 Speaker, Retriever Day, Summer Preview Day, Orientation, Just for Juniors
2016 Panelist, Training Session for Undergraduate Admissions

Community Service

2014-15 Volunteer, Columbia Lighthouse for the Blind