

CV | Samantha McDonald

Education:

Ph.D.	2016- In Progress	Informatics , Donald Bren School of Information and Computer Sciences University of California, Irvine Advisor: Melissa Mazmanian
M.S.	2019	Informatics , Donald Bren School of Information and Computer Sciences University of California, Irvine
B.S.	2016	Information Systems , Department of Information Systems University of Maryland, Baltimore County Research Advisor: Amy Hurst
<i>Abroad</i>	2014	Sophia University 上智大学 Tokyo, Japan

Experience:

2019	POPVOX , Redwood City Intern User testing, development, and research of their constituent correspondence software called LegiDash.
Summer 2018	Congressional Management Foundation , Washington D.C. Independent Consultant Advising the Congressional Management Foundation on matters related to constituent communication technology in Congress. Used to inform and produce public reports.
Summer 2017	Congressional Management Foundation , Washington D.C. Research Assistant Performed data analysis for four Members of Congress deploying constituent satisfaction surveys
2016-2017	Social Code Group , UCI Graduate Research Assistant Assisted Ph.D. students in their research of sustainable agriculture and polyculture systems.
2013-2016	Prototyping and Design Lab , UMBC Undergraduate Researcher Three years of research on 3D printing for assistive technology use and education. Including a year-long project educating 60 physical therapy students and their professors on the potential of 3D printing and rapid prototyping in their medical practice.
Summer 2015	Johns Hopkins University Applied Physics Lab (APL) , Laurel, MD Intern, Asymmetric Operations Unit. SIRIUS IARPA funded project. Worked with APL as a 3 rd party tester of video games to mitigate cognitive biases in intelligence agents. News Article: Drummond, Katie. "U.S. Intelligence Will Train Super-Sleuths With Videogames." <i>Wired.com</i> . 22 Nov. 2011. Web.
Summer 2013	Merkle Inc. , Columbia, MD Intern Capture SQL database requirements for a new billing application.

Publications¹:

- Papers
- [1] **The Limits of Value from Digital Messages to Members of the US Congress.** Samantha McDonald, Bonnie Nardi, Bill Tomlinson. Political Realities of Digital Communication. 2017. LIMITS 2017. ACM.
 - [2] **A Grand Challenge For HCI: Food + Sustainability.** Juliet Norton, Ankita Raturi, Bonnie Nardi, Sebastian Prost, Samantha McDonald, Daniel Pargman, Oliver Bates,

¹ ACM conference papers are considered prestigious high-impact publications in my field, much like journals in other fields.

- Maria Normark, Bill Tomlinson, Nico Herbig, and Lynn Dombrowski. 2017. *Interactions* 24, 6 (October 2017), 50-55.
- [3] **Uncovering Challenges and Opportunities for 3D Printing Assistive Technology with Physical Therapists.** Samantha McDonald, Niara Comrie, Erin Buehler, Nicholas Carter, Braxton Dubin, Karen Gordes, Sandy McCombe-Waller, Amy Hurst. ACM SIGACCESS Conference on Computers & Accessibility (ASSETS '16)
*Best Student Paper Award
- [4] **3D Printing: A Future Collapse-Compliant Means of Production.** Samantha McDonald, 2016. LIMITS 2016. ACM.
- [5] **Investigating the Implications of 3D Printing in Special Education.** Erin Buehler, William Easley, Samantha McDonald, Niara Comrie, Amy Hurst. 2016. ACM TACCESS.
- [6] **Inclusion and Education: 3D Printing For Integrated Classrooms.** Erin Buehler, William Easley, Samantha McDonald, Niara Comrie, Amy Hurst. 2015. In Proceedings of the 17th international ACM SIGACCESS Conference on Computers & Accessibility. ACM, New York, NY, USA.
- Workshops [7] **Sustainable Food Systems for Preventative and Prescriptive Medicine.** Samantha McDonald and Bill Tomlinson. Designing Sustainable Food Systems - CHI Workshop. 2017.
- Posters [8] **ICTs for Representative Constituent Communication in the U.S. Congress.** Samantha McDonald, 2018. ICT4S.
- [9] **Tactile aids for visually impaired graphical design education.** Samantha McDonald, Joshua Dutterer, Ali Abdolrahmani, Shaun K. Kane, and Amy Hurst. 2014. In Proceedings of the 16th international ACM SIGACCESS conference on Computers & accessibility. ACM, New York, NY, USA, 275-276.
- White Paper [10] **Constituent Correspondence in the U.S. Congress. A Survey of Staff Perspectives.** Samantha McDonald, 2018. The Democracy Fund.
- Informally Published **Staff Perspectives on the State of Constituent Correspondence in the U.S. Congress.** Legislative Branch Capacity Working Group. Blog. 19, December. 2018
- Data, Storytelling, and Congress.** Congressional Management Foundation Blog. 21, July. 2017.
- Stuck in Thomas Land No More.** Congressional Management Foundation Blog. 13, July. 2017.

Funding

2018-2021	Graduate Research Fellowship Program (GRFP) <i>National Science Foundation</i>	\$114,000
2018	Rob Kling Memorial Fellowship <i>University of California, Irvine - Donald Bren School of Information and Computer Sciences</i>	\$2,000
2018	Summer Research Grant <i>Democracy Fund</i>	\$10,000
2018	Conference Presentation Grant <i>University of California, Irvine - Donald Bren School of Information and Computer Sciences</i>	\$190
2017	Research Grant <i>UCI Center for Organizational Research</i>	\$500
2017	Conference Presentation Grant, <i>University of California, Irvine - Donald Bren School of Information and Computer Sciences</i>	\$300
2017	Associated Graduate Students (AGS) Travel Grant <i>University of California, Irvine</i>	\$400
2017	Graduate Assistance in Areas of National Need (GAANN) Fellowship <i>U.S. Department of Education</i>	\$11,000
2016	Collaborative Research Experiences For Undergraduates (CREU) <i>Computing Research Association For Women (CRA-W)</i>	\$10,300
2012-2016	Center for Women in Technology (CWIT) Scholarship Program <i>University of Maryland, Baltimore County</i>	\$40,000
2015	Vijay Jose Memorial Scholarship <i>University of Maryland Baltimore County, Information Systems Department</i>	\$200
2012, '14, '15	The Grace Hopper Conference Travel Scholarship <i>University of Maryland Baltimore County, Center for Women in Technology</i>	\$3,600

Research Awards:

- 2016 **Best Student Paper Award**, 2016, ASSETS SIGACCESS Conference on Computers & Accessibility
- 2014 **Best Research Poster**, *Clinical Fabrication of 3D Printed Assistive Technology*, UMBC Information Systems Department

- 2015 **Best Research Poster**, *Universal Gripper Using Granular Compression Technology*,
UMBC Information Systems Student Research Poster Contest

Pedagogy:

Teaching Training

- Fall 2016 ICS 298A, Teaching Assistantship Seminar
Fall 2018 Course Design Certificate Program
UCI Division of Teaching Excellence and Innovation

Teaching Assistantship

- Fall 2017 **ICS5**, Global Disruption and Information Technology
Online course, 200+ students with online discussion forums
around technology and sustainability.
Winter 2018 **ICS 162W**, Organizational Information Systems
Spring 2018 40+ students per class. Taught weekly discussion sections on technical
writing and organizational theories.

Workshops:

- 2018 **Opaque Media: A Workshop**, Workshop Presenter
2018 **UCI Technology, Law, and Society Summer Institute**, Participant
2017 **Food CHI Designing Sustainable Food Systems Workshop**, Assistant Organizer
2016 **Sustainable CHI Workshop**, Participant

Service:

- 2019 Co-Chair, Student Volunteers, iConference
2019 Paper Reviewer, ACM Human Factors in Computing Conference (CHI)
2018 Student Volunteer, ACM Human Factors in Computing Conference (CHI)
2017 Student Volunteer, ICT for Sustainability (ICT4S)
2017 ACM LIMITS Conference Assistant

Technical Skills:

Experience: R, C++, Java, SQL, XHTML, CSS,
Some Experience: Javascript, PHP, PSP, Python, Linux, Unix, 3D Modeling, Git, Arduino, 3D Printer
Hardware Assembly, Computer Hardware Assembly, Django Frameworks, MySQL, Postgres

Research Skills:

Iterative Prototyping of Physical Devices
Ethnographic Observations
Interview Protocol Development and Implementation
Qualitative Coding and Discourse Analysis
Survey Design, Piloting, and Implementation
Survey Regression Analysis and Modeling

Volunteer and Extracurriculars:

- 2019 **Google Explore CRS Undergraduate Workshop**, PhD Workshop Mentor
2017-2018 **Court Appointed Special Advocate (CASA)**, Orange County
Advocate and mentor for a child in the foster care/dependency system.
2017-2019 **UCI Anteater Recreational Center**, Rock Wall Setter
Summer 2017 **End of Term Archiving Hackathon (#DataRefuge)** UCI Organizer,
Preservation of federal data to support environmental issues.
2017 **UCI Sustainable Polycultures Project**, Volunteer gardener
2016-2017 **Vex Robotics Competitions**, Volunteer Robot Inspector
2016-2017 **UCI Aquaponics Club**, Volunteer Builder
2016 **American Alpine Institute** – Alpine Rock Climbing Course Completion
2015-2017 **Mid-Atlantic Climbers Association**, Trail Clean Up Volunteer
2013 **STEM Girl Power**, Guest Panel Speaker
2013, 2014 **UMBC CWIT Bits and Bytes Retreat For High School Girls**,

Guest Speaker and Volunteer
2013 **Maryland Food Bank Donation Coordinator**,
CWIT Scholars Living Learning Community
2012, 2015 **UMBC Rock Climbing Club**, Treasurer '15-16, Secretary '14-15