

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 (UMBC) Research Advisor: Amy Hurst
<i>Abroad</i>	2014	Sophia University 上智大学 Tokyo, Japan

Experience:

2019	Research Intern , POPVOX User testing, development, and research of their constituent correspondence software called LegiDash.
Summer 2018	Independent Consultant , Congressional Management Foundation Advising the Congressional Management Foundation on matters related to constituent communication technology in Congress. Used to inform and produce public reports.
Summer 2017	Research Assistant , Congressional Management Foundation Performed data analysis for four Congresspersons deploying constituent satisfaction surveys. Used to inform and produce public reports.
2016-2017	Research Assistant , Social Code Group Assisted Ph.D. students in their research of sustainable agriculture and polyculture systems.
2013-2016	Undergraduate Researcher , Prototyping and Design Lab, UMBC Research on 3D printing for assistive technology use and education.
Summer 2015	Intern , Johns Hopkins University Applied Physics Lab (APL) 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. <u>News Article</u> : Drummond, Katie. "U.S. Intelligence Will Train Super-Sleuths With Videogames." <i>Wired.com</i> . 22 Nov. 2011. Web.
Summer 2013	Intern , Merkle Inc. Captured SQL database requirements for a new billing application.

Publications¹:

- Papers
- [1] Juliet Norton, Birgit Penzenstadler, [Samantha McDonald](#), Emily Kang, Nora Koirala, Rieko Konishi, Gabriela Pena Carmona, Jailee Sha, Sebastian Troncoso. 2019. The Sage Community Coordinator: A Proof of Concept, In Proceedings of the Second Workshop on Computing within Limits. ACM
 - [2] [Samantha McDonald](#), Bonnie Nardi, and Bill Tomlinson. 2017. Political realities of digital communication: The limits of value from digital messages to members of the US congress. In Proceedings of the 2017 Workshop on Computing Within Limits. ACM, 129–138.

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

- [3] Juliet Norton, Ankita Raturi, Bonnie Nardi, Sebastian Prost, [Samantha McDonald](#), Daniel Pargman, Oliver Bates, Maria Normark, Bill Tomlinson, Nico Herbig, et al. 2017. A grand challenge for HCI: food+ sustainability. *Interactions* 24, 6 (2017), 50–55.
- [4] [Samantha McDonald](#), Niara Comrie, Erin Buehler, Nicholas Carter, Braxton Dubin, Karen Gordes, Sandy McCombe-Waller, and Amy Hurst. 2016. Uncovering challenges and opportunities for 3D printing assistive technology with physical therapists. In *Proceedings of the 18th International ACM SIGACCESS Conference on Computers and Accessibility*. ACM, 131–139. **Best Student Paper Award*
- [5] [Samantha McDonald](#). 2016. 3D printing: a future collapse-compliant means of production. In *Proceedings of the Second Workshop on Computing within Limits*. ACM, 4.
- [6] Erin Buehler, Niara Comrie, Megan Hofmann, [Samantha McDonald](#), and Amy Hurst. 2016. Investigating the implications of 3D printing in special education. *ACM Transactions on Accessible Computing (TACCESS)* 8, 3 (2016), 11.
- [7] Erin Buehler, William Easley, [Samantha McDonald](#), Niara Comrie, and Amy Hurst. 2015. Inclusion and education: 3D printing for integrated classrooms. In *Proceedings of the 17th International ACM SIGACCESS Conference on Computers & Accessibility*. ACM, 281–290.
- Workshops [8] [Samantha McDonald](#), Bill Tomlinson. 2017. “Sustainable Food Systems for Preventative and Prescriptive Medicine.” In *ACM CHI 2017 Conference on Human Factors in Computing Systems, Workshop on Designing Sustainable Food Systems*, Denver, CO.
- Posters [9] [Samantha McDonald](#). 2018. ICTs for Representative Constituent Communication in the U.S. Congress. *ICT4S*.
- [10] [Samantha McDonald](#), Joshua Dutterer, Ali Abdolrahmani, Shaun K Kane, and Amy Hurst. 2014. Tactile aids for visually impaired graphical design education. In *Proceedings of the 16th international ACM SIGACCESS conference on Computers & accessibility*. ACM, 275–276.
- White Paper [11] [Samantha McDonald](#). 2018. Constituent Correspondence in the U.S. Congress. A Survey of Staff Perspectives. The Democracy Fund.
- Informally Published [12] [Samantha McDonald](#). Staff Perspectives on the State of Constituent Correspondence in the U.S. Congress. Legislative Branch Capacity Working Group. Blog. 19, December. 2018
- [13] [Samantha McDonald](#). Data, Storytelling, and Congress. *Congressional Management Foundation Blog*. 21, July. 2017.
- [14] [Samantha McDonald](#). 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 , <i>Clinical Fabrication of 3D Printed Assistive Technology</i> , UMBC Information Systems Department
2015	Best Research Poster , <i>Universal Gripper Using Granular Compression Technology</i> , 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	Presenter , Opaque Media: A Workshop
2018	Participant , UCI Technology, Law, and Society Summer Institute
2017	Assistant Organizer , Food CHI Designing Sustainable Food Systems Workshop
2016	Participant , Sustainable CHI Workshop

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	Student Assistant, ACM LIMITS Conference

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 **PhD Workshop Mentor**, Google Explore CRS Undergraduate Workshop
- 2017-2018 **Court Appointed Special Advocate**, CASA Orange County
- 2017-2019 **Rock Wall Setter**, UCI Anteater Recreational Center
- Summer 2017 **UCI Organizer**, End of Term Archiving Hackathon (#DataRefuge)
- 2017 **Volunteer Gardener**, UCI Sustainable Polycultures Project
- 2016-2017 **Volunteer Robot Inspector**, Vex Robotics Competitions
- 2016-2017 **Volunteer Builder**, UCI Aquaponics Club
- 2016 **Course Completion**, American Alpine Institute – Alpine Rock Climbing
- 2015-2017 **Trail Volunteer**, Mid-Atlantic Climbers Association
- 2013 **Guest Panel Speaker**, STEM Girl Power
- 2013, 2014 **Guest Speaker and Volunteer**, UMBC CWIT Bits and Bytes Retreat For High School Girls
- 2013 **Donation Coordinator**, Maryland Food Bank CWIT Scholars
- 2012, 2015 **Treasurer '15-16, Secretary '14-15**, UMBC Rock Climbing Club