

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 Dissertation Committee: Melissa Mazmanian (chair), Paul Dourish, Erhardt Graeff, Bill Tomlinson
	Expected Spring 2021	
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

Research Areas:

Human-Computer Interaction (HCI), Civic Tech, Digital Government, Technology for Politics and Representation

Experience:

Summer 2020	UX Intern , Facebook Scheduled for June- September of 2020
2019-2020	Research Intern , POPVOX User testing, design, and research on a new constituent correspondence and media software called LegiDash.
Summer 2018	Independent Research/Consulting Conducting research and developing public reports in collaboration with the Democracy Fund, Congressional Management Foundation, and the Open Gov Foundation. Advised CMF on matters related to constituent communication technology in Congress.
Summer 2017	Research Assistant , Congressional Management Foundation Performed data analysis for four Congresspersons deploying constituent satisfaction surveys in their districts. Produced public reports on findings.
2016-2017	Research Assistant , Social Code Group, University of California, Irvine Assisted senior Ph.D. students on their technical innovations on sustainable agriculture and polyculture systems research.
2013-2016	Undergraduate Researcher , Prototyping and Design Lab, UMBC Extensive research on 3D printing for assistive technology use and education. Included 3D modeling, rapid prototyping, 3D printer construction, and user-centered design studies.
Summer 2015	Intern , Johns Hopkins University Applied Physics Lab (APL) Asymmetric Operations Unit. SIRIUS IARPA funded project. Assisted team to test 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:

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|-------------------|---|
| Journals | [J1] Communications Technology as Symbols of Institutional Legitimacy in the U.S. Congress.
Samantha McDonald, Fan Yin & Melissa Mazmanian
(2020) Journal of Information Technology & Politics (JITP) |
| | [J2] Investigating the implications of 3D printing in special education.
Erin Buehler, Niara Comrie, Megan Hofmann, Samantha McDonald, and Amy Hurst.
(2016) ACM Transactions on Accessible Computing (TACCESS) |
| Conference Papers | [C1] Information Materialities of Citizen Communication in the U.S. Congress.
Samantha McDonald and Melissa Mazmanian.
(2019) ACM CSCW Conference on Computer-Supported Cooperative Work and Social Computing, Article 47. November 2019. |
| | [C2] 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, and Amy Hurst.
(2016) ACM SIGACCESS Conference on Computers and Accessibility (ASSETS).
<i>*Best Student Paper Award</i> |
| | [C3] Inclusion and education: 3D printing for integrated classrooms.
Erin Buehler, William Easley, Samantha McDonald, Niara Comrie, and Amy Hurst.
(2015) ACM SIGACCESS Conference on Computers & Accessibility (ASSETS). |
| Workshops | [W1] The Sage Community Coordinator: A Proof of Concept
Juliet Norton, Birgit Penzenstadler, Samantha McDonald, Emily Kang, Nora Koirala, Rieko Konishi, Gabriela Pena Carmona, Jaanee Sha, Sebastian Troncoso.
(2019) ACM Workshop on Computing within Limits (LIMITS). |
| | [W2] Understanding the Role of Democratic Representation in Citizen Engagement.
Samantha McDonald.
(2019) ACM CSCW Conference on Computer-Supported Cooperative Work and Social Computing. Workshop on Design and the Politics of Collaboration: A Grassroots Perspective |
| | [W3] Political realities of digital communication: The limits of value from digital messages to members of the US Congress.
Samantha McDonald, Bonnie Nardi, and Bill Tomlinson. 2017.
(2017) ACM Workshop on Computing within Limits (LIMITS). |
| | [W4] Sustainable Food Systems for Preventative and Prescriptive Medicine.
Samantha McDonald, Bill Tomlinson.
(2017) ACM CHI Conference on Human Factors in Computing Systems. Workshop on Designing Sustainable Food Systems. |
| | [W5] 3D printing: a future collapse-compliant means of production.
Samantha McDonald.
(2016) ACM Workshop on Computing within Limits (LIMITS). |
| Posters | [P1] TweetHeads: An Analysis of Twitter Use By Different Heads of State.
Sara Milkes, Samantha McDonald, Benedict Salazar Bolgado.
(2019) ACM CSCW Conference on Computer-Supported Cooperative Work and Social Computing. Poster. |
| | [P2] ICTs for Representative Constituent Communication in the U.S. Congress.
Samantha McDonald.
(2018) ICT4S Information and Communications Technology for Sustainability. Poster. |
| | [P3] Tactile aids for visually impaired graphical design education.
Samantha McDonald, Joshua Dutterer, Ali Abdolrahmani, Shaun K Kane, and Amy Hurst.
(2014) ACM SIGACCESS Conference on Computers & Accessibility (ASSETS). |
| White Paper | [14] Constituent Correspondence in the U.S. Congress. A Survey of Staff Perspectives.
Samantha McDonald.
(2018) The Democracy Fund. |
| Online Articles | [15] From citizens to data points: A word of caution for legislators.
Samantha McDonald and Melissa Mazmanian. |

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

- (2019) Blog Post. LegBranch.org. 10 December. 2019.
- [16] **How Congress turns citizens' voices into data points.**
Samantha McDonald
(2019) The Conversation. 16, September. 2019.
- [17] **Staff Perspectives on the State of Constituent Correspondence in the U.S. Congress.**
Samantha McDonald
(2018) Legislative Branch Capacity Working Group. 19, December. 2018
- [18] **A grand challenge for HCI: food+ sustainability.**
Juliet Norton, Ankita Raturi, Bonnie Nardi, Sebastian Prost, Samantha McDonald, Daniel Pargman, Oliver Bates, Maria Normark, Bill Tomlinson, Nico Herbig, et al.
(2017) Interactions 24, 6 (2017), 50–55.
- [19] **Data, Storytelling, and Congress**
Samantha McDonald.
(2017) Congressional Management Foundation Blog. 21, July. 2017.
- [20] **Stuck in Thomas Land No More.**
Samantha McDonald.
(2017) Congressional Management Foundation Blog. 13, July. 2017.

Funding

2018-2021	Graduate Research Fellowship Program (GRFP) National Science Foundation	\$114,000
2020	Associated Graduate Students (AGS) Travel Grant University of California, Irvine	\$600
2019	Congressional Research Grant The Dirksen Congressional Center	\$2,450
2019	Research Grant UCI Center for Organizational Research	\$1,000
2019	Conference Travel Scholarship University of California, Irvine - Department of Informatics	\$1,000
2018	Rob Kling Memorial Fellowship University of California, Irvine - Donald Bren School of Information and Computer Sciences	\$2,000
2018	Summer Research Grant Democracy Fund	\$10,000
2018	Conference Presentation Grant University of California, Irvine - Donald Bren School of Information and Computer Sciences	\$190
2017	Research Grant UCI Center for Organizational Research	\$500
2017	Conference Presentation Grant, University of California, Irvine - Donald Bren School of Information and Computer Sciences	\$300
2017	Associated Graduate Students (AGS) Travel Grant University of California, Irvine	\$400
2017	Graduate Assistance in Areas of National Need (GAANN) Fellowship U.S. Department of Education	\$11,000
2016	Collaborative Research Experiences For Undergraduates (CREU) Computing Research Association For Women (CRA-W)	\$10,300
2012-2016	Center for Women in Technology (CWIT) Scholarship Program University of Maryland, Baltimore County	\$40,000
2015	Vijay Jose Memorial Scholarship University of Maryland Baltimore County, Information Systems Department	\$200
2012, '14, '15	The Grace Hopper Conference Travel Scholarship University of Maryland Baltimore County, Center for Women in Technology	\$3,600

Research Awards:

- 2016 **Best Student Paper Award, 2016, ASSETS SIGACCESS Conference on Computers & Accessibility**
- 2014 **Best Department Research Poster, Clinical Fabrication of 3D Printed Assistive Technology, UMBC Information Systems Department**
- 2015 **Best Department Research Poster, Universal Gripper Using Granular Compression Technology, UMBC Information Systems Student Research Poster Contest**

Pedagogy:

Teaching

Spring 2020 **ICS3**, Internet Technologies and Their Social Impact
130 students. Online course due to COVID.

Teaching Assistantships

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.

Teaching Training

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

Presentations:

2020 **Conference Presentation**, TICTeC 2020.[Scheduled Remote - Recorded Presentation]
2019 **Guest Lecture**, University of California, Irvine. ICS3, Internet Technologies and Their
Social Impact
2019 **Guest Lecture**, University of Southern California, CSCI 499, Computing For Social
Good
2019 **Presenter**, The Rise of Platforms: Individual, Institutional, and Governance Questions
for Communication Research. ICA Post-Conference.
2018 **Presenter**, Opaque Media: A Workshop. UCI.
2018 **Participant**, UCI Technology, Law, and Society Summer Institute
2017 **Assistant Organizer**, Food CHI Designing Sustainable Food Systems Workshop
2016 **Participant**, Sustainable CHI Workshop

Affiliations:

2019 **Graduate Affiliate**, Jack W. Peltason Center for the Study of
Democracy. University of California, Irvine.

Service:

2019-2020 **Lab Manager**, LUCI, Laboratory for Ubiquitous Computing and Interaction
2020 **AC/Reviewer**, ACM Human Factors in Computing Conference (CHI)
2019 **Co-Chair**, Student Volunteers, iConference
2019 **Paper Reviewer**, ACM Human Factors in Computing Conference (CHI)
Paper Reviewer, ACM Computer Supported Cooperative Work and Social Computing
(CSCW)
2018 **Student Volunteer**, ACM Human Factors in Computing Conference (CHI)
2017 **Student Volunteer**, ICT for Sustainability (ICT4S)
2017 **Student Assistant**, ACM LIMITS Workshop

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

Research Skills:

Iterative Prototyping of Physical Devices
 Ethnographic Fieldwork
 Cognitive Interviewing For Survey Research
 Website User Testing and Protocol Development
 Interview Protocol Development and Implementation
 Qualitative Coding and Discourse Analysis
 Survey Design and Implementation
 Survey Regression Analysis and Modeling

Volunteer and Extracurriculars:

2017-2020 **Court Appointed Special Advocate**, Foster Care Volunteer, CASA Orange County
 2019 **PhD Workshop Mentor**, Google Explore CRS Undergraduate Workshop
 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