

CV | Samantha McDonald

Education:

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

Experience:

- Winter 2019 **Pop Vox**
Intern - Redwood City
User testing, development, and research of constituent correspondence software called LegiDash.
- Summer 2018 **Congressional Management Foundation**
Independent Consultant - Washington D.C.
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**
Research Assistant - Washington D.C.
Performed data analysis for four Congresspersons deploying constituent satisfaction surveys.
- 2016-2017 **Social Code Group**
Graduate Student Research Assistant - Informatics Department, UCI
Assisted Ph.D. students in their research of sustainable agriculture and polyculture systems.
- 2013-2016 **Prototyping and Design Lab**
Undergraduate Researcher - UMBC
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)**
Asymmetric Operations Unit Intern- Laurel, MD
SIRIUS IARPA funded project. Worked with APL as a 3rd 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." *Wired.com*. 22 Nov. 2011. Web.
- Summer 2013 **Merkle Inc.**,
Intern - Columbia, MD
Captured 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, Maria

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

- 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 Written Work **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/
 Spring 2018 **ICS 162W**, Organizational Information Systems
 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 ACM LIMITS Conference Assistant

Technical Skills:

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

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:

- 2017-2018 **Court Appointed Special Advocate (CASA)**, Orange County
 Advocate and mentor for a child in the foster care/dependency system.
- 2017-Current **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
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