Dr. Samantha A. McDonald

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EDUCATION

Ph.D. Informatics
University of California, Irvine, Donald Bren School of Information and Computer Sciences
August 2016 - April 2021

M.S. Informatics
University of California, Irvine, Donald Bren School of Information and Computer Sciences
August 2016 - May 2019
Courses in political science, sociology, anthropology, statistics, computer science, and business.

B.S. Information Systems
University of Maryland, Baltimore County, College of Engineering and Information Technology
August 2012 - May 2016

DISSERTATION

"Constituent Communication in Representative Democracy: Testing Platforms for Deliberation in the U.S. Congress"
Committee: Dr. Melissa Mazmanian (chair), Dr. Paul Dourish, Dr. Erhardt Graeff, Dr.Bill Tomlinson

Research Topics:

- **Technology:** How do Members of Congress communicate with their constituents? What kinds of systems and technologies do Legislative Correspondents use to capture constituent information?
- **Democracy:** How does the design of in-office technology affect Member use of constituent input? How does turning citizen input into data affect our understanding of democratic participation?
- **Design:** How can we design deliberative constituent engagement to enhance the Member's ability to interpret the needs, views, and concerns of their district and use their input to make important policy decisions?

Research was supported by the National Science Foundation, the Democracy Fund, the Dirksen Congressional Research Center, the Congressional Management Foundation, the UCI Center for Organizational Research, And Popvox Inc.

WORK EXPERIENCE

UNIVERSITY OF MARYLAND, COLLEGE PARK, College Park, Maryland, USA
Professional Track Faculty Lecturer
August 2025 - Present

- Teaching courses on Information Systems, User Experience, and Visual Design, bridging the gaps between *complex systems*, *human behavior*, information technology, and *civic impact*.
- Developing course-wide learning outcomes and new course development structures.
- Contributing to College through the development of new programs.
- Participating in thesis committees and mentoring students and their research.

Civic Advocate, Newport Beach, California, USA
Newport Beach Mooring Association. Pro Bono.
Jan 2024 - Present
- Advocating for affordable housing and public recreational access in the California tidelands, supporting a local non-profit.
- Conducting legal research, developing memorandums and letters for public comment, meeting with city, county, and state regulatory agencies and officials, attending councils and commission meetings, and advocating through media outreach.

META PLATFORMS INC., Menlo Park, California, USA
UX Researcher
September 2021 - February 2023, Hours per week: 40

- Supported cross-functional monetization teams of software engineers, designers, product managers, and data scientists to research and develop statistical tools for advertisers.
- Led 3-4 research projects per quarter, interviewing 100+ businesses worldwide to improve statistical literacy, information accessibility, and product actionability. For example, I identified recall issues in product flow, leading to UX improvements that boosted adoption by 16%.
- Improved team research workflow by directing a multi-team literature review to improve access to historical research and introducing a new rapid prototyping feedback method to accelerate user feedback cycles.
- Onboarded and mentored two UX researchers; managed the tasks of one consulting UXR.

POPVOX FOUNDATION, Redwood City, California, USA
Research Consultant
January 2021 - August 2021, Hours per week: 40

- Developed one of the first asynchronous online forums between Members of the U.S. Congress and their constituents, applying deliberative democracy frameworks.
- Designed all aspects of experiment including recruitment, surveys, and deliberation methods, while balancing academic rigor and practical relevance.
- Conducted UX research and heuristic evaluations for POPVOX's LegiDash software, collaborating with a software engineer to enhance platform usability.
- Partnered with external stakeholders including the Congressional Management Foundation, The Democracy Fund, UCI Center for Congressional Research, and The Dirksen Congressional Research Center.

CONGRESSIONAL MANAGEMENT FOUNDATION, Washington D.C., USA
Independent Researcher + Consultant
May 2017 - June 2018, Hours per week: 40

- Conducted ethnographic research on congressional correspondence, interviewing 40+ staff and visiting 100+ congressional offices.
- Mapped congressional communication tools using qualitative coding and discourse analysis.
- Analyzed constituent satisfaction survey data for four congressional offices.
- Attended hearings and seminars to assess the evolving congressional tech landscape.
- Published academic and public articles on technology's impact on democracy.

JOHNS HOPKINS APPLIED PHYSICS LABORATORY, Laurel, Maryland, USA
Research Internship, Asymmetric Operations Unit
May 2015 - August 2015, Hours per week: 40

- Supported an IARPA project designing educational games to reduce cognitive biases in intelligence analysis.

- Designed and administered participant surveys, analyzing game-based learning effectiveness.
- Supervised playtesting sessions with cognitive bias mitigation experts.

PEDAGOGY

LECTURER

University of Maryland, College Park

- INST 703, Visual Design Studio. Spring 2026.
    - Master course on visual design, with focus on studio project and skills with Figma, Graphic Design, and Animation.
- INST 201, Introduction to Information Systems. Fall/Spring 2025-26.
    - Introduces students to Information Science, with a core focus on exploring theories of Information Technology, and it's role in Society through writing and critical thinking.
- INST 104, Design Across Campus Fall/Spring 2025-26.
    - Introduces students to fundamental concepts in critical design thinking, design methods, and design-based professions.

University of California, Irvine

- ICS3, Internet Technologies and Their Social Impact. Spring/Fall 2020
    - Examines Internet technologies and social implications at the individual, group and societal levels.

TEACHING ASSISTANT

University of California, Irvine.
- ICS5, Global Disruption and Information Technology. Fall 2017.
    - Explores how new forms of information technology may support transition to a sustainable civilization. Topics include design and implementation of IT systems, science of global change, online community building, and "green IT".
- ICS 162W, Organizational Information Systems. Winte 2017 /Spring 2018.
    - Introduces the role of information systems in organizations, components and structure of organizational information systems, and techniques used in information systems analysis, design, and implementation.

ADDITIONAL EXPERIENCE

CASA ORANGE COUNTY
Court Appointed Special Advocates (CASA)
2017-Present

- Watch over and advocate for two foster care children to make sure they don't get lost in the overburdened legal system.
- Dedicated 600+ hours advocating and mentoring children, and completed over 100 hours of training in childhood trauma and foster care regulation.

NEWPORT BEACH MOORING ASSOCIATION
California Tidelands and Maritime Advocate
2023-Present

- Sailed over 5,000 nautical miles of the Pacific Ocean between California, Mexico, and the South Pacific, showcasing high resiliency, patience, and maritime skill.

- Spent over 300 hours in 2 years advocating in city council, city-commission, and state-commission meetings to protect equitable public access to state tidelands.
- Provided PR content-writing for advocacy organizations.

SKILLS + CERTIFICATIONS

User Research + Design | Interviews | Rapid Prototyping | Requirements Analysis | Task Design + Redesign | Ethnography | Unmoderated + Moderated User Testing | Journey Maps | Focus Groups | Experimentation | Survey Design + Deployment | Statistical Analysis | AI Tools for Research | Accessibility Design | Heuristic Analysis | Agile Methods
Platforms Figma | Qualtrics | Mural | Canva | WordPress | Miro | Dovetail
Code JavaScript | C++ | HTML+CSS | R | SQL | Java
Certifications | Introduction to Web Accessibility - W3Cx • WAI0.1x

PUBLICATIONS

– Journals –
[J1] Configurations of Digital Participatory Budgeting. Victoria Palacin, Samantha McDonald, Pablo Aragón, and Matti Nelimarkka. 2024. ACM Trans. Comput.-Hum. Interact. 31, 2, Article 28.

[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)

[J3] 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.

– 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).
*Best Student Paper Award

– Workshops –
[W1] Technologies for Constituent Communication in the U.S. Congress. Samantha McDonald. (2020) ACM CSCW Conference on Computer-Supported Cooperative Work and Social Computing. Doctoral Consortium.

[W2] The Sage Community Coordinator: A Proof of Concept. Juliet Norton, Birgit Penzenstadler, Samantha McDonald, Emily Kang, Nora Koirala, Rieko Konishi, Gabriela Pena Carmona, Jainee Sha, Sebastian Troncoso. (2019) ACM Workshop on Computing within Limits (LIMITS).

[W3] 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

[W4] 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).

[W5] 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.

[W6] 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.

[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.

– White Papers + Articles –
[14] Constituent Correspondence in the U.S. Congress. A Survey of Staff Perspectives. Samantha McDonald. (2018) The Democracy Fund.

[15] From citizens to data points: A word of caution for legislators. Samantha McDonald and Melissa Mazmanian. (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. 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. Department of Informatics | $1,000
2018 Rob Kling Memorial Fellowship. Donald Bren School of Information and Computer Sciences | $2,000
2018 Summer Research Grant. Democracy Fund | $10,000
2018 Conference Presentation Grant. Donald Bren School of Information and Computer Sciences | $190
2017 Research Grant. UCI Center for Organizational Research | $500
2017 Conference Presentation Grant. Donald Bren School of Information and Computer Sciences | $300
2017 Travel Grant. Associated Graduate Students University of California, Irvine | $400
2017 Graduate Assistance in Areas of National Need Fellowship. U.S. Department of Education | $11,000
2016 CREU Research Grant. Computing Research Association For Women. | $10,300
2012-2016 Center for Women in Technology (CWIT) Scholarship. UMBC | $40,000
2015 Vijay Jose Memorial Scholarship. UMBC, Information Systems Department | $200
2012, '14, '15 The Grace Hopper Conference Travel Scholarship. UMBC, Center for Women in Technology | $3,600

PRESENTATIONS

2021 Guest Panelist, Online Participation and Democracies. University of Toronto
2021 Podcast Guest, Personal Finance For PhDs by Dr. Emily Roberts
2020 Visiting Guest Lecture, Political in Human-Computer Interaction, University of Helsinki
2020 Guest Class Panelist, INST-800 The Engaged Intellectual, University of Maryland, College Park
2020 Community Research Presentation, LIMITS. ACM Workshop on Computing within Limits
2020 Research Presentation, TICTeC 2020
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. UC Irvine
2018 Participant, UCI Technology, Law, and Society Summer Institute
2017 Assistant Organizer, Food CHI Designing Sustainable Food Systems Workshop
2016 Participant, Sustainable CHI Workshop

ACADEMIC SERVICE

2019-20 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)
2019 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