

Allison McDonald

Contact

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Research Interests

My research interests lie in the intersection of technology and society, particularly in the areas of privacy and security. I am interested in how technology and tech policy exacerbate marginalization and impact digital safety.

Keywords: Security; Privacy; Human-Computer Interaction; Digital Inequity

Education

University of Michigan, Ann Arbor, MI 2016 – 2022

PhD, Computer Science

Advisors: J. Alex Halderman & Florian Schaub

Dissertation Title: Privacy & Security for Marginalized Communities

Europa-Universität Viadrina, Frankfurt (Oder), Germany 2015 – 2016

As part of the Roger M. Jones Fellowship, I spent one year taking courses in an International Human Rights and Humanitarian Law LLM program.

University of Michigan, Ann Arbor, MI 2010 – 2015

Bachelor of Science in Engineering, Computer Science

Bachelor of Science, German

Albert-Ludwigs-Universität Freiburg, Freiburg im Breisgau, Germany 2012 – 2013

Academic Year in Freiburg study abroad participant.

Affiliations

Center on Privacy and Technology at Georgetown Law, Washington, DC August 2019 – present

Research Fellow

Center for Ethics, Society, and Computing (ESC), Ann Arbor, MI September 2021 – present

ESC Researcher

Awards & Honors

Distinguished Paper Award, 2021

USENIX Security Symposium

Awarded for: “It’s stressful having all these phones”: Investigating Sex Workers’ Safety Goals, Risks, and Practices Online

Service Award for Excellence in Climate, Diversity, Equity and Inclusion, 2020

This award recognizes the recipients’ commitment and action in working to improve the climate of the Computer Science & Engineering division.

Best Student Paper Award, 2020

IEEE Symposium on Security and Privacy

Awarded for: Can Voters Detect Malicious Manipulation of Ballot Marking Devices?

Allison McDonald

Best Paper Award, 2018

ACM CHI Conference on Human Factors in Computing Systems

Awarded for: Keeping a Low Profile?: Technology, Risk and Privacy among Undocumented Immigrants

Funding

Facebook Fellowship, 2019 – 2021

Provides two years of funding to computer science doctoral students conducting innovative and relevant research.

Rackham Merit Fellowship, 2016

Provides funding for two years to selected incoming PhD students at U-M.

Roger M. Jones Fellowship, 2015

Provides one year of tuition and living expenses to one graduating engineer at the University of Michigan in order to deepen an engineering education through studying the humanities at a European university.

Baden-Württemberg Stipendium, 2012

Awarded for academic merit to fund international students enrolled in universities in Baden-Württemberg, Germany.

Publications

Peer-Reviewed Conference Publications

Trauma-Informed Computing: Towards Safer Technology Experiences for All

Janet X. Chen,* Allison McDonald,* Yixin Zou,* Emily Tseng, Kevin A. Roundy, Acar Tamersoy, Florian Schaub, Thomas Ristenpart, Nicola Dell [* denotes equal authorship]

ACM CHI Conference on Human Factors in Computing Systems (CHI), May 2022

“It’s stressful having all these phones”: Investigating Sex Workers’ Safety Goals, Risks, and Practices Online

Allison McDonald, Catherine Barwulor, Michelle L. Mazurek, Florian Schaub, Elissa M. Redmiles

30th USENIX Security Symposium (USENIX Security), August 2021

★ Distinguished Paper Award

The Role of Computer Security Customer Support in Helping Survivors of Intimate Partner Violence

Yixin Zou, Allison McDonald, Julia Narakornpichit, Nicola Dell, Thomas Ristenpart, Kevin Roundy, Florian Schaub, Acar Tamersoy

30th USENIX Security Symposium (USENIX Security), August 2021

The Annoying, the Disturbing, and the Weird: Challenges with Phone Numbers as Identifiers and Phone Number Recycling

Allison McDonald, Carlo Sugatan, Tamy Guberek, Florian Schaub

ACM CHI Conference on Human Factors in Computing Systems (CHI), May 2021

“Disadvantaged in the American-dominated internet”: Sex, Work, and Technology

Catherine Barwulor, Allison McDonald, Eszter Hargittai, Elissa M. Redmiles

ACM CHI Conference on Human Factors in Computing Systems (CHI), May 2021

Can Voters Detect Malicious Manipulation of Ballot Marking Devices?

Matthew Bernhard, Allison McDonald, Henry Meng, Jensen Hwa, Nakul Bajaj, Kevin Chang, J. Alex Halderman

41st IEEE Symposium on Security and Privacy (Oakland), May 2020

★ Best Student Paper Award

Allison McDonald

403 Forbidden: A Global View of CDN Geoblocking

Allison McDonald, Matt Bernhard, Luke Valenta, Benjamin VanderSloot, Will Scott, Nick Sullivan, J. Alex Halderman, Roya Ensafi

ACM Internet Measurement Conference (IMC), October 2018

Quack: Scalable Remote Measurement of Application-Layer Censorship

Benjamin VanderSloot, Allison McDonald, Will Scott, J. Alex Halderman, Roya Ensafi

27th USENIX Security Symposium (USENIX Security), August 2018

Keeping a Low Profile? Technology, Risk and Privacy among Undocumented Immigrants

Tamy Guberek, Allison McDonald, Sylvia Simioni, Abraham H. Mhaidli, Kentaro Toyama, Florian Schaub

ACM CHI Conference on Human Factors in Computing Systems (CHI), April 2018

★ Best Paper Award

Refereed Workshop Publications

Ethical Practices for Security Research with At-Risk Populations

Rasika Bhalerao, Vaughn Hamilton, Allison McDonald, Elissa M. Redmiles, Angelika Strohmayer

Workshop on Ethics in Computer Security (EthiCS), June 2022.

Designing Digital Literacy and Security Trainings for Latinx Immigrants in the United States

Sylvia Simioni, Allan Martell, Allison McDonald, Abraham H. Mhaidli, Tamy Guberek, Kentaro Toyama, Florian Schaub

3rd SOUPS Workshop on Inclusive Privacy and Security (WIPS), August 2018.

An ISP-Scale Deployment of TapDance

Sergey Frolov, Fred Douglas, Will Scott, Allison McDonald, Benjamin VanderSloot, Rod Hynes, Adam Kruger, Michalis Kallitsis, David G. Robinson, Nikita Borisov, J. A. Halderman, Eric Wustrow

Proc. 7th USENIX Workshop on Free and Open Communications on the Internet (FOCI), August 2017

Reports

American Dragnet: Data-Driven Deportation in the 21st Century

Nina Wang, Allison McDonald, Daniel Bateyko, Emily Tucker

Center on Privacy & Technology at Georgetown Law ([link](#))

APIs and Your Privacy

N. Cameron Russell, Florian Schaub, Allison McDonald, William Sierra-Rocafort

February 14, 2019, Available on SSRN ([link](#))

Other Publications

There is no prohibition on face surveillance in Detroit

Allison McDonald

July 29, 2019, *The Center on Privacy & Technology* on Medium ([link](#))

The web really isn't worldwide — every country has different access

Allison McDonald

December 8, 2018, *The Conversation* ([link](#))

Talks

Investigating Sex Workers' Safety Goals, Risks, and Practices Online

Guest lecture in the Cornell Security Seminar. November 23, 2021.

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Investigating Sex Workers' Safety Goals, Risks, and Practices Online

Guest lecture in the Information Security Group at Royal Holloway University of London. October 21, 2021.

Investigating Sex Workers' Safety Goals, Risks, and Practices Online

Guest lecture in Privacy Engineering course, Northeastern University. August 18, 2021.

Spyware and Digital Intimate Partner Abuse

Invited speaker (w/ Yixin Zou) for the Sexual Assault Prevention and Awareness Center, University of Michigan. March 2021.

Uncertain Concern: How Undocumented Immigrants in the US Navigate Technology

Guest lecture in "Information Privacy, Surveillance and Exposure," University of Michigan. February 11, 2020.

Keeping a Low Profile?: Technology, Risk and Privacy among Undocumented Immigrants

Invited speaker at SUMIT 2018 Cyber Security Conference, Ann Arbor, USA. October 25, 2018.

Uncertain Concern: How Undocumented Immigrants in the US Navigate Technology

34th Chaos Communications Congress (34C3), Leipzig, Germany. December 30, 2017.

Teaching

EECS 388: Introduction to Computer Security

University of Michigan

Graduate Student Instructor

Fall 2018, Winter 2019

EECS 388: Introduction to Computer Security

University of Michigan

Guest Lecturer on Control Flow Hijacking

Winter 2019, Fall 2019

Online Self-Defense: How to protect your privacy, identity and security when using technology

Fall 2020
Co-instructor for a digital security class through the Osher Lifelong Learning Institute at the University of Michigan, an organization providing education for adult learners ages 50+.

Community Computer Security Workshops

2016 – present

I design and lead computer security workshops, primarily for journalists, lawyers, activists, and community groups.

- Saline Area Senior Center, November 2021
- Knight-Wallace Fellows, February 2020
- Latinx community workshops, July 2018
- Latinx community workshops, November 2017
- Knight-Wallace Fellows, October & November 2017
- Clean Water Action, May 2017
- Knight-Wallace Fellows, April 2017
- Privacy and Technology Law Association, January 2017
- International Human Rights Law Master's Program, April 2016

Work Experience

Center on Privacy and Technology at Georgetown Law, Washington, DC

Summer Fellow

May 2019 – August 2019

Expedia, Inc., Bellevue, WA

Software Intern

May 2014 – August 2014

University of Michigan, College of Engineering, Ann Arbor, MI

Computing Consultant

January 2011 – May 2015

Allison McDonald

Service

Program Committee Member

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| USENIX Security Symposium | 2023 |
| IEEE Symposium on Security and Privacy (IEEE S&P) | 2023 |
| Workshop on Technology and Consumer Protection (ConPro) | 2022 |

External Reviewer

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| ACM Conference on Human Factors in Computing System (CHI) | 2018, 2020, 2021 |
| Proceedings of the ACM on Human-Computer Interaction (CSCW) | 2020, 2021 |
| Proceedings on Privacy Enhancing Technologies (PETS) | 2020, 2021 |

Dissonance Event Series

Organizing Member September 2016 – present
Dissonance explores topics of security, privacy, law, and ethics by bringing together speakers from many disciplines and facilitating challenging discussions.

ECSEL+

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| <i>Co-Chair</i> | June 2019 – May 2021 |
| <i>Treasurer</i> | June 2018 – May 2019 |

ECSEL+ is a group to support gender minorities in the Computer Science graduate program at the University of Michigan.

Computer Science Graduate Student Organization

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| <i>Vice President and Treasurer</i> | May 2017 – May 2018 |
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CSEG is the graduate student organization representing graduate computer science students at the University of Michigan.

LSWE-SUCCESS

2015

Participated in planning a leadership camp in Kakata, Liberia. The camp was organized as a cooperation between the Graduate Society of Women Engineers at the University of Michigan and Liberian women in engineering and science higher education programs.