

Christo Wilson

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Education

- 2008–2012 **PhD in Computer Science**, *University of California, Santa Barbara*
Thesis: *Battling Spam and Sybils on the Social Web* advised by Ben Y. Zhao
- 2006–2007 **Masters in Computer Science**, *University of California, Santa Barbara*
- 2002–2006 **BS in Creative Studies (CS Emphasis)**, *University of California, Santa Barbara*
Graduated with Highest Honors

Employment History and Affiliations

- 2020–2021 **Faculty Associate**, *Berkman Klein Center for Internet & Society, Harvard University*, Cambridge, MA
- 2019–2020 **Fellow**, *Berkman Klein Center for Internet & Society, Harvard University*, Cambridge, MA
- 2018–Present **Associate Professor**, *Khoury College of Computer Sciences, Northeastern University*, Boston, MA
- 2017–Present **Director of the BS in Cybersecurity**, *Khoury College of Computer Sciences, Northeastern University*, Boston, MA
- 2012–2018 **Assistant Professor**, *Khoury College of Computer Sciences, Northeastern University*, Boston, MA
- 2011 **Research Internship**, *Microsoft Research*, Redmond, WA
Mentor: Cheng Huang
- 2010 **Research Internship**, *Microsoft Research*, Cambridge, UK
Mentor: Thomas Karagiannis

Honors and Awards

- 2019 **Sloan Fellowship**, *Sloan Foundation*
- 2019 **Outstanding Analysis Award**, *AAAI ICWSM*
For *Bias Misperceived: The Role of Partisanship and Misinformation in YouTube Comment Moderation*
- 2019 **Privacy Papers for Policymakers Award**, *Future of Privacy Forum*
For *Diffusion of User Tracking Data in the Online Advertising Ecosystem*
- 2019 **Applied Networking Research Prize**, *IRTF and the Internet Society*
For *Understanding the Role of Registrars in DNSSEC Deployment*
- 2018 **Honorable Mention Award**, *ACM CSCW*
For *Auditing Partisan Audience Bias within Google Search*
- 2018 **Honorable Mention Award**, *ACM CHI*
For *Investigating the Impact of Gender on Rank in Resume Search Engines*

- 2017 **IEEE Cybersecurity Award for Innovation, IEEE SecDev**
For *CRLite: a Scalable System for Pushing all TLS Revocations to All Browsers*
- 2017 **Distinguished Paper Award, NDSS**
For *A Longitudinal, End-to-End View of the DNSSEC Ecosystem*
- 2015 **Best Teacher Award, Khoury College of Computer Sciences, Northeastern University**
- 2012 **Outstanding Dissertation Award, UCSB**
- 2011 **Best Paper: Honorable Mention Award, ACM SIGCOMM**
For *Better Never than Late: Meeting Deadlines in Datacenter Networks*
- 2010–2011 **Dean’s Fellowship, UCSB**
- 2008–2009 **Distinguished Graduate Student Research Fellowship, UCSB**

Refereed Conference and Workshop Publications

- 2021 Wilson, Christo, Avijit Ghosh, Shan Jiang, Alan Mislove, Lewis Baker, Janelle Szary, Kelly Trindel, and Frida Polli (2021). “Building And Auditing Fair Algorithms: A Case Study In Candidate Screening”. In: *Proceedings of the Conference on Fairness, Accountability, and Transparency (FAccT 2021)*. Virtual Event, Canada. 2021.
- 2020 Aqeel, Waqar, Zachary Hanif, James Larisch, Olamide Omolola, Taejoong Chung, Dave Levin, Bruce Maggs, Alan Mislove, Bryan Parno, and Christo Wilson (2020). “Assertion-carrying Certificates”. In: *Proceedings of the Workshop on Foundations of Computer Security (FCS 2020)*. Boston, MA. 2020.
- 2020 Jiang, Shan, Miriam Metzger, Andrew Flanagin, and Christo Wilson (2020). “Modeling And Measuring Expressed (dis)belief In (mis)information”. In: *Proceedings of the International AAAI Conference on Weblogs and Social Media (ICWSM 2020)*. Atlanta, Georgia. 2020.
- 2020 Jiang, Shan, Ronald E. Robertson, and Christo Wilson (2020). “Reasoning About Political Bias In Content Moderation”. In: *Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI 20)*. New York, New York. 2020.
- 2020 Robertson, Ronald E. and Christo Wilson (2020). “Websearcher: Tools For Auditing Web Search”. In: *Proceedings of Computation + Journalism Symposium*. Boston, Massachusetts. 2020.
- 2019 Bashir, Muhammad Ahmad, Sajjad Arshad, Wil Robertson, Engin Kirda, and Christo Wilson (2019). “A Longitudinal Analysis Of The Ads.Txt Standard”. In: *ACM Internet Measurement Conference*. Amsterdam, Netherlands. 2019.
- 2019 Bashir, Muhammad Ahmad, Umar Farooq, Maryam Shahid, Muhammad Fareed Zaffar, and Christo Wilson (2019). “Quantity Vs. Quality: Evaluating User Interest Profiles Using Ad Preference Managers”. In: *Network and Distributed System Security Symposium*. San Diego, CA. 2019.

- 2019 Hu, Desheng, Shan Jiang, Ronald E. Robertson, and Christo Wilson (2019). "Auditing The Partisanship Of Google Search Snippets". In: *International World Wide Web Conference*. San Francisco, CA. 2019.
- 2019 Jiang, Shan, John Martin, and Christo Wilson (2019). "Who's The Guinea Pig? Investigating Online A/b/n Tests In-the-wild". In: *Conference on Fairness, Accountability, and Transparency*. Atlanta, GA. 2019.
- 2019 Jiang, Shan, Ronald E. Robertson, and Christo Wilson (2019). "Bias Misperceived: The Role Of Partisanship And Misinformation In Youtube Comment Moderation". In: *International AAAI Conference on Weblogs and Social Media*. Munich, Germany. 2019.
- 2019 Robertson, Ronald E., Shan Jiang, David Lazer, and Christo Wilson (2019). "Auditing Auto-complete: Recursive Algorithm Interrogation And Suggestion Networks". In: *ACM Web Science Conference*. Boston, MA. 2019.
- 2019 Rweyemamu, Walter, Tobias Lauinger, Christo Wilson, William Robertson, and Engin Kirda (2019a). "Clustering And The Weekend Effect: Recommendations For The Use Of Top Domain Lists In Security Research". In: *Passive and Active Measurement Conference*. Puerto Varas, Chile. 2019.
- 2019 Sapiezynski, Piotr, Wesley Zeng, Ronald E. Robertson, Alan Mislove, and Christo Wilson (2019). "Quantifying The Impact Of User Attention On Fair Group Representation In Ranked Lists". In: *Companion Proceedings of the 2019 Web Conference (WWW 2019 Companion)*. San Francisco, CA. 2019.
- 2019 Tahir, Rashid, Faizan Ahmad, Hammas Saeed, Shiza Ali, Fareed Zaffar, and Christo Wilson (2019). "Bringing The Kid Back Into Youtube Kids: Detecting Inappropriate Content On Video Streaming Platforms". In: *Proceedings of the 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2019)*. Vancouver, Canada. 2019.
- 2019 Yan, Yuxuan, Zhenhua Li, Qi Alfred Chen, Christo Wilson, Tianyin Xu, Ennan Zhai, Yong Li, and Yunhao Liu (2019). "Understanding And Detecting Overlay-based Android Malware At Market Scales". In: *International Conference on Mobile Systems, Applications, and Services*. Seoul, South Korea. 2019.
- 2018 Bashir, Muhammad Ahmad, Sajjad Arshad, Engin Kirda, William Robertson, and Christo Wilson (2018). "How Tracking Companies Circumvented Ad Blockers Using Websockets". In: *ACM Internet Measurement Conference*. Boston, MA. 2018.
- 2018 Chen, Le, Aniko Hannak, Ruijin Ma, and Christo Wilson (2018). "Investigating The Impact Of Gender On Rank In Resume Search Engines". In: *Annual Conference of the ACM Special Interest Group on Computer Human Interaction*. Montreal, Canada. 2018.

- 2018 Chung, Taejoong, Jay Lok, Balakrishnan Chandrasekaran, David Choffnes, Dave Levin, Bruce Maggs, Alan Mislove, John Rula, Nick Sullivan, and Christo Wilson (2018). "Is The Web Ready For Oosp Must Staple?" In: *ACM Internet Measurement Conference*. Boston, MA. 2018.
- 2018 Jiang, Shan, Le Chen, Alan Mislove, and Christo Wilson (2018). "On Ridesharing Competition And Accessibility: Evidence From Uber, Lyft, And Taxi". In: *International World Wide Web Conference*. Lyon, France. 2018.
- 2018 Robertson, Ronald, David Lazer, and Christo Wilson (2018). "Auditing Politically-related Search Rankings And Suggestions". In: *International World Wide Web Conference*. Lyon, France. 2018.
- 2017 Chung, Taejoong, Roland van Rijswijk-Deij, Bala Chandrasekaran, David Choffnes, Dave Levin, Bruce M. Maggs, Alan Mislove, and Christo Wilson (2017). "A Longitudinal, End-to-end View Of The Dnssec Ecosystem". In: *USENIX Security Symposium*. 2017.
- 2017 Chung, Taejoong, Roland van Rijswijk-Deij, David Choffnes, Alan Mislove, Christo Wilson, Dave Levin, and Bruce Maggs (2017). "Understanding The Role Of Registrars In Dnssec Deployment". In: *ACM Internet Measurement Conference*. 2017.
- 2017 Hannak, Aniko, Claudia Wagner, David Garcia, Alan Mislove, Markus Strohmaier, and Christo Wilson (2017). "Bias In Online Freelance Marketplaces: Evidence From Taskrabit And Fiverr". In: *ACM conference on Computer Supported Cooperative Work*. 2017.
- 2017 Larisch, James, David Choffnes, Dave Levin, Bruce M. Maggs, Alan Mislove, and Christo Wilson (2017). "Crlite: A Scalable System For Pushing All Tls Revocations To All Browsers". In: *IEEE Symposium on Security and Privacy*. 2017.
- 2017 Lauinger, Tobias, Abdelberi Chaabane, Sajjad Arshad, William Robertson, Christo Wilson, and Engin Kirda (2017). "Thou Shalt Not Depend On Me: Analysing The Use Of Outdated Javascript Libraries On The Web". In: *Network and Distributed System Security Symposium*. 2017.
- 2017 Li, Zhenhua, Weiwei Wang, Christo Wilson, Jian Chen, Chen Qian, Taeho Jung, Lan Zhang, Kebin Liu, Xiangyang Li, and Yunhao Liu (2017). "Fbs-radar: Uncovering Fake Base Stations At Scale In The Wild". In: *Network and Distributed System Security Symposium*. 2017.
- 2017 Lu, Zhen, Zhenhua Li, Jian Yang, Tianyin Xu, Ennan Zhai, Yao Liu, and Christo Wilson (2017). "Accessing Google Scholar Under Extreme Internet Censorship: A Legal Avenue". In: *International Middleware Conference*. Las Vegas, NV. 2017.
- 2017 Sapiezynski, Piotr, Valentin Kassarnig, Christo Wilson, Sune Lehmann, and Alan Mislove (2017). "Academic Performance Prediction In A Gender-imbalanced Environment". In: *FATREC Workshop on Responsible Recommendation*. Como, Italy. 2017.

- 2016 Bashir, Muhammad Ahmad, Sajjad Arshad, William Robertson, and Christo Wilson (2016). "Tracing Information Flows Between Ad Exchanges Using Retargeted Ads". In: *USENIX Security Symposium*. 2016.
- 2016 Bashir, Muhammad Ahmad, Sajjad Arshad, and Christo Wilson (2016). "Recommended For You: A First Look At Content Recommendation Networks". In: *ACM Internet Measurement Conference*. 2016.
- 2016 Cangialosi, Frank, Taejoong Chung, Dave Choffnes, Dave Levin, Bruce Maggs, Alan Mislove, and Christo Wilson (2016). "Measurement And Analysis Of Private Key Sharing In The Https Ecosystem". In: *ACM Conference on Computer and Communications Security*. 2016.
- 2016 Chen, Le, Alan Mislove, and Christo Wilson (2016). "An Empirical Analysis Of Algorithmic Pricing On Amazon Marketplace". In: *International World Wide Web Conference*. Montreal, Quebec, Canada. 2016.
- 2016 Chung, Taejoong, Yabing Liu, Dave Choffnes, Dave Levin, Bruce Maggs, Alan Mislove, and Christo Wilson (2016). "Measuring And Applying Invalid Ssl Certificates: The Silent Majority". In: *ACM Internet Measurement Conference*. 2016.
- 2016 Leung, Christophe, Jingjing Ren, David Choffnes, and Christo Wilson (2016). "Should You Use The App For That? Comparing The Privacy Implications Of Web- And App-based Online Services". In: *ACM Internet Measurement Conference*. 2016.
- 2016 Li, Zhenhua, Weiwei Wang, Tianyin Xu, Xin Zhong, Xiang-Yang Li, Yunhao Liu, Christo Wilson, and Ben Y. Zhao (2016). "Exploring Cross-application Cellular Traffic Optimization With Baidu Trafficguard". In: *Symposium on Networked System Design and Implementation*. Santa Clara, CA. 2016.
- 2016 Soeller, Gary, Karrie Karahalios, Christian Sandvig, and Christo Wilson (2016). "Mapwatch: Detecting And Monitoring International Border Personalization On Online Maps". In: *International World Wide Web Conference*. Montreal, Quebec, Canada. 2016.
- 2015 Chen, Le, Alan Mislove, and Christo Wilson (2015). "Peeking Beneath The Hood Of Uber". In: *ACM Internet Measurement Conference*. Tokyo, Japan. 2015.
- 2015 Kliman-Silver, Chloe, Aniko Hannak, Christo Wilson, and Alan Mislove (2015). "Location, Location, Location: The Impact Of Geolocation On Web Search Personalization". In: *ACM Internet Measurement Conference*. Tokyo, Japan. 2015.
- 2015 Li, Zhenhua, Christo Wilson, Tianyin Xu, Yao Liu, Zhen Lu, and Yinlong Wang (2015). "Offline Downloading In China: A Comparative Study". In: *ACM Internet Measurement Conference*. Tokyo, Japan. 2015.

- 2015 Liu, Yabing, Will Tome, Liang Zhang, David Choffnes, Dave Levin, Bruce Maggs, Alan Mislove, Aaron Schulman, and Christo Wilson (2015). "An End-to-end Measurement Of Certificate Revocation In The Web's Pki". In: *ACM Internet Measurement Conference*. Tokyo, Japan. 2015.
- 2015 Yang, Xiaofeng, Qian Yang, and Christo Wilson (2015). "Penny For Your Thoughts: Searching For The 50 Cent Party On Sina Weibo". In: *International AAAI Conference on Weblogs and Social Media*. 2015.
- 2015 Yang, Zhi, Jilong Xue, Christo Wilson, Ben Y. Zhao, and Yafei Dai (2015a). "Process-driven Analysis Of Dynamics In Online Social Interactions". In: *Conference on Online Social Networks*. Stanford, CA. 2015.
- 2015 Yang, Zhi, Jilong Xue, Christo Wilson, Ben Y. Zhao, and Yafei Dai (2015b). "Uncovering User Interaction Dynamics In Online Social Networks". In: *International AAAI Conference on Weblogs and Social Media*. Oxford, UK. 2015.
- 2014 Hannak, Aniko, Gary Soeller, David Lazer, Alan Mislove, and Christo Wilson (2014). "Measuring Price Discrimination And Steering On E-commerce Web Sites". In: *ACM Internet Measurement Conference*. Vancouver, Canada. 2014.
- 2014 Li, Zhenhua, Cheng Jin, Tianyin Xu, Christo Wilson, Yao Liu, Linsong Cheng, Yunhao Liu, Yafei Dai, and Zhi-Li Zhang (2014). "Towards Network-level Efficiency For Cloud Storage Services". In: *ACM Internet Measurement Conference*. Vancouver, Canada. 2014.
- 2014 Ottoni, Raphael, Diego de Las Casas, Joao Paulo Pesce, Wagner Meira Jr, Christo Wilson, Alan Mislove, and Virgilio Almeida (2014). "Of Pins And Tweets: Investigating How Users Behave Across Image- And Text-based Social Networks". In: *International AAAI Conference on Weblogs and Social Media*. Ann Arbor, Michigan. 2014.
- 2014 Zhang, Liang, David Choffnes, Tudor Dumitras, Dave Levin, Alan Mislove, Aaron Schulman, and Christo Wilson (2014). "Analysis Of Ssl Certificate Reissues And Revocations In The Wake Of Heartbleed". In: *ACM Internet Measurement Conference*. Vancouver, Canada. 2014.
- 2013 Chen, Le, Chi Zhang, and Christo Wilson (2013). "Tweeting Under Pressure: Analyzing Trending Topics And Evolving Word Choice On Sina Weibo". In: *Conference on Online Social Networks*. Boston, Massachusetts. 2013.
- 2013 Hannak, Aniko, Piotr Sapiezynski, Arash Molavi Kakhki, Balachander Krishnamurthy, David Lazer, Alan Mislove, and Christo Wilson (2013). "Measuring Personalization Of Web Search". In: *International World Wide Web Conference*. Rio de Janeiro, Brazil. 2013.
- 2013 Li, Zhenhua, Christo Wilson, Zhefu Jiang, Yao Liu, Ben Zhao, Cheng Jin, Zhi-Li Zhang, and Yafei Dai (2013). "Efficient Batched Synchronization In Dropbox-like Cloud Storage Services". In: *International Middleware Conference*. 2013.

- 2013 Wang, Gang, Tristan Konolige, Christo Wilson, Xiao Wang, Heather Zheng, and Ben Zhao (2013). "You Are How You Click: Clickstream Analysis For Sybil Detection". In: *USENIX Security Symposium*. Washington, D.C. 2013.
- 2013 Wang, Gang, Manish Mohanlal, Christo Wilson, Xiao Wang, Miriam Metzger, Haitao Zheng, and Ben Y. Zhao (2013). "Social Turing Tests: Crowdsourcing Sybil Detection". In: *Network and Distributed System Security Symposium*. 2013.
- 2012 Metzger, Miriam, Christo Wilson, Rebekah Pure, and Ben Y. Zhao (2012). "Invisible Interactions: What Latent Social Interaction Can Tell Us About Social Relationships In Social Networking Sites". In: *International Communication Association Conference*. Phoenix, Arizona. 2012.
- 2012 Wang, Gang, Christo Wilson, Xiaohan Zhao, Yibo Zhu, Manish Mohanlal, Haitao Zheng, and Ben Y. Zhao (2012). "Serf And Turf: Crowdturfing For Fun And Profit". In: *International World Wide Web Conference*. Lyon, France. 2012.
- 2012 Zhao, Xiaohan, Alessandra Sala, Christo Wilson, Xiao Wang, Sabrina Gaito, Haitao Zheng, and Ben Y. Zhao (2012). "Multi-scale Dynamics In A Massive Online Social Network". In: *ACM Internet Measurement Conference*. Boston, Massachusetts. 2012.
- 2011 Sala, Alessandra, Xiaohan Zhao, Christo Wilson, Haitao Zheng, and Ben Y. Zhao (2011). "Sharing Graphs Using Differentially Private Graph Models". In: *ACM Internet Measurement Conference*. Berlin, Germany. 2011.
- 2011 Wilson, Christo, Hitesh Ballani, Thomas Karagiannis, and Ant Rowstron (2011). "Better Never Than Late: Meeting Deadlines In Datacenter Networks". In: *Conference of the ACM Special Interest Group on Data Communication*. Toronto, Canada. 2011.
- 2011 Wilson, Christo, Troy Steinbauer, Gang Wang, Alessandra Sala, Haitao Zheng, and Ben Y. Zhao (2011). "Privacy, Availability And Economics In The Polaris Mobile Social Network". In: *Workshop on Hot Topics in Mobile Computing Systems and Applications*. Phoenix, Arizona. 2011.
- 2011 Yang, Zhi, Christo Wilson, Xiao Wang, Tingting Gao, Ben Y. Zhao, and Yafei Dai (2011). "Uncovering Social Network Sybils In The Wild". In: *ACM Internet Measurement Conference*. Berlin, Germany. 2011.
- 2010 Gao, Hongyu, Jun Hu, Christo Wilson, Zhichun Li, Yan Chen, and Ben Y. Zhao (2010). "Detecting And Characterizing Social Spam Campaigns". In: *ACM Internet Measurement Conference*. Melbourne, Victoria, Australia. 2010.
- 2010 Jiang, Jing, Christo Wilson, Xiao Wang, Peng Huang, Wenpeng Sha, Yafei Dai, and Ben Y. Zhao (2010). "Understanding Latent Interactions In Online Social Networks". In: *ACM Internet Measurement Conference*. Melbourne, Victoria, Australia. 2010.

- 2010 Sala, Alessandra, Lili Cao, Christo Wilson, Robert Zablit, Haitao Zheng, and Ben Y. Zhao (2010). "Measurement-calibrated Graph Models For Social Network Experiments". In: *International World Wide Web Conference*. Raleigh, North Carolina. 2010.
- 2010 Wilson, Christo, Alessandra Sala, Joseph Bonneau, Robert Zablit, and Ben Y. Zhao (2010). "Don't Tread On Me: Moderating Access To Osn Data With Spikestrip". In: *Workshop on Social Networks*. Boston, Massachusetts. 2010.
- 2010 Zhao, Xiaohan, Alessandra Sala, Christo Wilson, Haitao Zheng, and Ben Y. Zhao (2010). "Orion: Shortest Path Estimation For Large Social Graphs". In: *Workshop on Social Networks*. Boston, Massachusetts. 2010.
- 2009 Wilson, Christo, Bryce Boe, Alessandra Sala, Krishna P.N. Puttaswamy, and Ben Y. Zhao (2009). "User Interactions In Social Networks And Their Implications". In: *European Conference on Computer Systems*. Nuremberg, Germany. 2009.
- 2008 Puttaswamy, Krishna P. N., Alessandra Sala, Christo Wilson, and Ben Y. Zhao (2008). "Defending Anonymity Against Predecessor Attacks In Bluemoon". In: *International Conference on Network Protocols*. 2008.
- 2008 Stone-Gross, Brett, Christo Wilson, Kevin Almeroth, Elizabeth Belding, Heather Zheng, and Konstantina Papagiannaki (2008). "Malware In Ieee 802.11 Wireless Networks". In: *Passive and Active Measurement Conference*. 2008.
- 2008 Swamynathan, Gayatri, Christo Wilson, Bryce Boe, Kevin Almeroth, and Ben Y. Zhao (2008). "Do Social Networks Improve E-commerce?: A Study On Social Marketplaces". In: *Workshop on Social Networks*. Seattle, Washington. 2008.
- 2007 Wilson, Christo, Chris Coakley, and Ben Y. Zhao (2007). "Fairness Attacks In The Explicit Control Protocol". In: *IEEE International Workshop on Quality of Service*. Evanston, Illinois. 2007.

Journal Publications

- 2020 Ognyanova, Katya, Ronald Robertson, Christo Wilson, and David Lazer (2020). "The Consequences Of Fake News: Lower Trust In Media, Higher Trust In Government When Your Side Is In Power". In: *Harvard Kennedy School Misinformation Review* 1.4. 2020.
- 2019 Rweyemamu, Walter, Tobias Lauinger, Christo Wilson, William Robertson, and Engin Kirda (2019b). "Getting Under Alexa's Umbrella: Infiltration Attacks Against Internet Top Domain Lists". In: *Information Security* 11723. 2019.
- 2018 Jiang, Shan and Christo Wilson (2018). "Linguistic Signals Under Misinformation And Fact-checking: Evidence From User Comments On Social Media". In: *Proceedings of the ACM: Human-Computer Interaction* 2.CSCW. 2018.

- 2018 Metzger, Miriam J., Christo Wilson, and Ben Y. Zhao (2018). "Benefits Of Browsing? The Prevalence, Nature, And Effects Of Profile Consumption Behavior In Social Network Sites". In: *Journal of Computer-Mediated Communication* 23.2. 2018.
- 2018 Robertson, Ronald E., Shan Jiang, Kenneth Joseph, Lisa Friedland, David Lazer, and Christo Wilson (2018). "Auditing Partisan Audience Bias Within Google Search". In: *Proceedings of the ACM: Human-Computer Interaction* 2.CSCW. 2018.
- 2017 Epstein, Robert, Ronald E. Robertson, David Lazer, and Christo Wilson (2017). "Suppressing The Search Engine Manipulation Effect (seme)". In: *Proceedings of the ACM: Human-Computer Interaction* 1.CSCW. 2017.

Book Chapters

- 2018 Mislove, Alan and Christo Wilson (2018). "A Practitioner's Guide To Ethical Web Data Collection". In: *The Oxford Handbook of Networked Communication*. Ed. by Brooke Foucault Welles and Sandra González-Bailón. Oxford University Press. 2018.
- 2011 Metzger, Miriam, Christo Wilson, Rebekah Pure, and Ben Y. Zhao (2011). "Invisible Interactions: What Latent Social Interaction Can Tell Us About Social Relationships In Social Networking Sites". In: *Networked Sociability and Individualism: Technology for Personal and Professional Relationships*. Ed. by Francesca Comunello. Hershey, PA: IGI Global Publishing. Chap. 5, pp. 79–102. 2011.

Funded Grants – External

National Science Foundation

- 2019–2022 CHS: Small: Auditing Critical Dependencies Between Online Media Platforms, *PI*, IIS-1910064, \$500K, 100% effort.
- 2019–2022 CNS Core: Large: Collaborative Research: Towards an Evolvable Public Key Infrastructure, *Co-PI with Dave Levin (UMD) and Alan Mislove and Bruce Maggs (Duke) and Bryan Parno (CMU) and Taejoong Chung (RPI)*, CNS-1901090, \$400K (\$1.2M Total), 50% effort.
- 2016–2021 CAREER: Towards Methodologies and Tools for Conducting Algorithm Audits, *PI*, IIS-1553088, \$535K, 100% effort.
- 2016–2020 TWC: Medium: Collaborative: Measuring and Improving the Management of Today's PKI, *Co-PI with Alan Mislove and David Choffnes*, CNS-1563320, \$599K, 33% effort.
- 2018–2019 Planning Grant: Engineering Research Center for Sharing economy – Humans, Automation, Resilience and Engineering: SHARE, *Co-PI*, EEC-1840493, \$99K, 1% effort.
- 2014–2018 CHS: Medium: Towards Transparency of Personalization on the Web, *PI with Alan Mislove and David Lazer*, IIS-1408345, \$727K, 33% effort.
- 2013–2016 CSR: Small: Towards Confederated Web-Based Services, *Co-PI with Alan Mislove*, CNS-1319019, \$499K, 50% effort.

pymetrics

- 2020 Auditing pymetrics Models for Gender and Racial Bias
Co-PI with Alan Mislove \$104K, 50% effort

Google

2019–2021 2019 Android Security and Privacy REsearch project (ASPIRE), *Co-PI with David Choffnes*, \$75K, 50% effort.

Sloan Foundation

2019–2021 Sloan Fellowship, *PI*, \$75K, 100% effort.

Mozilla Foundation

2019–2020 Integrating Value Sensitive Design Training Throughout the CS Curriculum, *Co-PI with Ronald Sandler*, \$148K, 50% effort.

Democracy Fund

2018–2019 Misinformation on Social Media Platforms Around the 2018 Election Season, *Co-PI with David Lazer*, \$40K, 50% effort.

Russell Sage Foundation

2017–2019 Inequality in Online Labor Markets, *PI with David Lazer*, \$114K, 50% effort.

Knight Foundation

2015 Public Access to Pricing Personalization, *Co-PI with Alan Mislove and David Lazer*, \$30K, 33% effort.

Data Transparency Lab

2015 Revealing and Controlling Mobile Privacy Leaks, *Co-PI with Alan Mislove and Dave Choffnes*, Gift, \$50K, 33% effort.

Intelligent Automation, Inc.

2014–2015 A Trusted Framework for Embedded Systems, *Co-PI with Engin Kirda and Wil Robertson*, Subcontract on AFRL SBIR contract FA8750-13-C-0112, \$225K, 33% effort.

Verisign

2013 Quantifying WHOIS Usage and Defending Against Abuse, *PI with Engin Kirda*, Gift, \$20K, 50% effort.

Funded Grants – Internal

2017–2018 TIER 1: Uncovering Strategic Consumer Data Collection and Sharing in Online Markets by Tracing Information Flows, *PI with Yakov Bart*, \$50K, 50% effort.

Invited Talks

Algorithm Auditing, the Internet Filter Bubble, and Online Price Discrimination

2020 University of Michigan MIDAS Seminar Series, University of Michigan, Ann Arbor, MI

2020 Auditing pymetrics' Approach to Adverse Impact Testing, pymetrics, Boston, MA

2019 Berkman Klein Center for Internet & Society speaker series, Harvard, Cambridge, MA

2018 Civil Servant Kickoff Workshop, MIT, Cambridge, MA

2018 Keynote at the European Symposium Series on Societal Challenges in Computational Social Science, EuroCSS, Cologne, Germany

2017 Keynote at the Perceptual Biases and Social Media Workshop, ICWSM, Montreal, QC

2016 Tufts ECE/CS Colloquium, Tufts University, Medford, MA

2016 Talks on Technology Science and Topics in Privacy Series, Harvard University, Cambridge, MA

- 2016 nuACM Lecture, Northeastern University, Boston, MA
- 2016 SASE Northeast Regional Conference, Northeastern University, Boston, MA
- 2015 Guest Lecture at Lyft, San Francisco, CA
- 2015 NUterm Lecture, Northeastern University, Boston, MA
- 2015 nuACM Lecture, Northeastern University, Boston, MA
- 2015 European Commission, Brussels, Belgium
- 2013 Peking University, Beijing, China
- [Defending Against Crowdsourced Threats on the Social Web](#)
- 2013 Tsinghua University, Beijing, China
- 2013 Microsoft Research, Asia, Beijing, China
- 2013 Indian Institute of Technology (IIT), Delhi, India
- 2012 Peking University, Beijing, China
- 2012 University of California, San Diego, CA
- 2012 IEEE Computer Communications Workshop (CCW), Sedona, AZ
- 2012 Northeastern University, Boston, MA

Invited Workshops and Panels

- 2019 Workshop on Consumer Protection (ConPro), IEEE Security & Privacy, San Francisco, CA
- 2018 Association of Internet Researchers (AoIR) Roundtable Panel, Montreal, QC
- 2018 NSF CHS Panel, Washington DC
- 2017 Auditing Algorithms NSF Workshop, Ann Arbor, CA
- 2017 Privacy Law Scholars Conference, Berkeley, CA
- 2017 Workshop on Technology and Consumer Protection, IEEE Security and Privacy, San Jose, CA
- 2017 Connected Futures Conference, Northeastern University, Boston, MA
- 2017 nuACM Professors Panel, Northeastern University, Boston, MA
- 2016 SASE Career Panel, Northeastern University, Boston, MA
- 2016 Dagstuhl Seminar, "Data, Responsibly" (16291), Dagstuhl, Germany
- 2016 NSF CHS Panel, Washington DC
- 2016 NSF NeTS Panel, Washington DC
- 2016 Privacy Law Scholars Conference, Washington DC
- 2016 Health Privacy Summit, Washington DC
- 2015 Algorithmic Transparency in the Media, Columbia University, New York, NY
- 2015 Buying Services Everywhere in the Single Market, European Commission, Brussels, Belgium
- 2014 Northeastern University Empower Campaign Event, Washington DC
- 2014 Data Transparency Lab Kickoff Workshop, Telefonica Research, Barcelona, Spain
- 2014 Algorithmic Transparency Workshop, Columbia University, New York, NY
- 2014 Web Privacy and Transparency Workshop, Princeton University, Princeton, NJ
- 2014 AAAI Symposium on Social Hacking and Cognitive Security on the Internet and New Media, Stanford University, Stanford, CA
- 2013 NSF NeTS Panel, Washington DC

Conference Talks

- 2019 Bias Misperceived: The Role of Partisanship and Misinformation in YouTube Comment Moderation, ICWSM
- 2018 Investigating the Impact of Gender on Rank in Resume Search Engines, CHI
- 2011 Privacy, Availability and Economics in the Polaris Mobile Social Network, HotMobile
- 2010 Don't Tread on Me: Moderating Access to OSN Data with SpikeStrip, WOSN
- 2009 User Interactions in Social Networks and their Implications, EuroSys
- 2008 Do Social Networks Improve e-Commerce: a Study on Social Marketplaces, WOSN
- 2007 Fairness Attacks in the Explicit Control Protocol, IWQoS

Teaching

- Fall 2020 CS 3700, Network and Distributed Systems, *80 students*
- Spring 2019 CS 2550, Foundations of Cybersecurity, *100 students*
- Spring 2019 CS 3700, Network and Distributed Systems, *50 students*
- Fall 2018 CS 3700, Network and Distributed Systems, *50 students*
- Spring 2018 CS 2550, Foundations of Cybersecurity, *85 students*
- Fall 2017 CS 2500, Fundamentals of Computer Science 1, *37 students*
- Fall 2016 CS 3700, Network and Distributed Systems, *64 students*
- Spring 2016 CS 3700, Network and Distributed Systems, *69 students*
- Fall 2015 CS 3700, Network and Distributed Systems, *49 students*
- Spring 2015 CS 4740/6740, Network Security, *34 students*
- Fall 2014 CS 5600, Computer Systems, *30 students*
- Spring 2014 CS 5600, Computer Systems, *75 students*
- Fall 2013 IS 4700/CS 5750, Social Computing (**new course**, co-developed and taught with Alan Mislove), *12 students*
- Fall 2013 CS 4700/5700, Fundamentals of Computer Networks (co-taught with Alan Mislove), *66 students*
- Spring 2013 CS 4700/5700, Fundamentals of Computer Networks, *48 students*
- Fall 2012 CS 4700/5700, Fundamentals of Computer Networks, *67 students*

Advising

Supervision of Graduate Students

- 2019–Present Johanna Gunawan, *PhD student, Northeastern University*, (Co-advised with David Choffnes and Woodrow Hartzog).
- 2019–Present Avijit Ghosh, *PhD student, Northeastern University*, (Co-advised with Alan Mislove).
- 2018–Present Muhammad Ali, *PhD student, Northeastern University*, (Co-advised with Alan Mislove).
- 2017–Present Desheng Hu, *PhD student, Northeastern University*.
- 2016–Present Ronald Robertson, *PhD student, Northeastern University*, (Co-advised with David Lazer).
- 2016–Present Shan Jiang, *PhD student, Northeastern University*.
- 2014–2019 Muhammad Ahmad Bashir, *PhD student, Northeastern University*, (Currently at ICSI).
Thesis title: On the Privacy Implications of Real Time Bidding

- 2012–2017 Le Chen, *PhD student, Northeastern University, (Currently at Facebook).*
Thesis title: Measuring Algorithms in Online Marketplaces.

PhD Committees

- 2019 Jingjing Ren, *Northeastern University.*
2017 Tobias Lauinger, *Northeastern University.*
2016 Kaan Onarlioglu, *Northeastern University.*
2016 Piotr Sapiezynski, *Technical University of Denmark.*
2015 Yabing Liu, *Northeastern University.*
2014 Ancsa Hannak, *Northeastern University.*

Masters Theses Advised

- 2014 Avanish Pathak, *Masters student, Northeastern University.*
Thesis title: An analysis of various tools, methods and systems to generate fake accounts for social media
2014 Krati Kiyawat, *Masters student, Northeastern University.*
Thesis title: Do Web Browsers Obey Best Practices When Validating Digital Certificates?

Masters Committees

- 2014 Susan Collins, *Northeastern University.*

Supervision of Undergraduate Research Assistants

- 2018 Sarah Cline, *Northeastern University.*
2018 John Martin, *Northeastern University.*
2017 Wesley Zeng, *Northeastern University.*
2017 Elleen Pan, *Northeastern University.*
2017 James Larisch, *Northeastern University, (currently pursuing a PhD at Harvard).*
2016 Gary Soeller, *Northeastern University.*
2016 Christophe Leung, *Northeastern University, (Co-advised with Dave Choffnes).*
2014 Chloe Kliman-Silver, *Brown University, (Co-advised with Alan Mislove).*

Supervision of Interns

- 2016 Priyam Tejaswin, *Vellore Institute of Technology.*
2014 Ishaan Batta, *Indian Institute of Technology (IIT), Delhi.*
2013 Raphael Ottoni, *Universidade Federal de Minas Gerais, Brazil.*
2013 Diego Las Casas, *Universidade Federal de Minas Gerais, Brazil.*
2013 João Paulo Pesce, *Universidade Federal de Minas Gerais, Brazil.*

Service to the Institution

College Service

- 2018–Present **Member**, Institute Advisory Board, Cybersecurity and Privacy Institute at Northeastern
2017–Present **Representative**, CCIS Undergraduate Committee
2017–Present **Representative**, CCIS Academic Integrity Committee
2017–Present **Representative**, CCIS Teaching Award Committee
2016–2017 **Representative**, CCIS Program Design Principals Reform Committee
2015–2016 CCIS College Evangelist

- 2014–2015 **Representative**, CCIS Hiring Committee
- 2014 **Representative**, CCIS Faculty Merit Committee
- 2012–2014 **Representative**, CCIS PhD Committee
- Faculty Advisor**
- 2017–Present Northeastern University Planeswalkers
- 2014–2019 Northeastern chapter of the ACM Club

Service to the Discipline

Executive Committee Member

- 2017–Present Conference on Fairness, Accountability, and Transparency (FAcCT).

Co-General Chair

- 2020–2021 Workshop on Technology and Consumer Protection (ConPro).
- 2019 Conference on Web Science (WebSci).
- 2018 Internet Measurement Conference (IMC).

Program Committee Co-chair

- 2018 Conference on Fairness, Accountability, and Transparency (FAcCT).

Program Committee Member

- 2020–2021 Symposium on Privacy Enhancing Technologies (PETS).
- 2020 IEEE Security and Privacy (S&P, Oakland).
- 2018–2019 Internet Measurement Conference (IMC).
- 2016–2019 International Conference on Computational Social Science (IC2S2).
- 2017–2019 Workshop on Technology and Consumer Protection (ConPro).
- 2018 Workshop on Responsible Recommendation (FATREC).
- 2018 Workshop on Privacy in the Electronic Society (WPES).
- 2018 Conference on Computer-Supported Cooperative Work and Social Computing (CSCW).
- 2018 International World Wide Web Conference (WWW), *Security and Privacy Track*.
- 2018 International World Wide Web Conference (WWW), *Misinformation Track*.
- 2017–2018 International Conference on Web Search and Data Mining (WSDM).
- 2014–2018 International Conference on Weblogs and Social Media (ICWSM).
- 2017 Data Transparency Lab Grants Program.
- 2016–2017 Workshop on Fairness, Accountability, and Transparency in Machine Learning (FATML).
- 2016 International Workshop on Complex Networks and their Applications.
- 2016 International Conference on Social Informatics (SocInfo).
- 2016 Workshop on Data and Algorithmic Transparency (DAT).
- 2016 Passive and Active Measurement Conference (PAM).
- 2016 ACM MobiSys workshop on Mobile Data (MOBIDATA).
- 2015–2016 Computational Social Science Winter Symposium (CSSWS).
- 2015–2016 Internet Measurement Conference (IMC).
- 2015 International Conference on Parallel Processing (ICPP).
- 2014–2015 International Conference on Mobile Systems and Pervasive Computing (MobiSPC).
- 2013–2015 International World Wide Web Conference (WWW), *Security and Privacy Track*.

- 2012–2014 International Workshop on Collaborative Big Data (C-Big).
- 2013 International World Wide Web Conference (WWW), *Social Networks Track*.
- 2013 IEEE INFOCOM.
- 2013 ACS/IEEE International Conference on Computer Systems and Applications (AICCSA).
[Track Chair](#)
- 2016 International World Wide Web Conference (WWW), *Crowdsourcing and Social Media Track*.
[Local Chair](#)
- 2015 Data Transparency Lab Conference, *Boston, MA*.
[Workshop Organizer](#)
- 2015 International Conference on Weblogs and Social Media (ICWSM).
[Budget Chair](#)
- 2014 Conference on Online Social Networks (COSN).
[Poster Committee Chair](#)
- 2014 Conference on Online Social Networks (COSN).
[Poster Committee Member](#)
- 2014 SIGCOMM.
[Registration Chair](#)
- 2013 Conference on Online Social Networks (COSN).
[Journal Reviewer](#)
- ACM TNET, TWEB, TKDD, TISSEC, TIFS, TOIS
- IEEE Internet Computing, TKDE, TDSC
- Other Journal of Computer Security

Selected Press Coverage

- 2018 Here's what we know about Google's mysterious search engine, *The Washington Post*
- 2018 Yes, your smartphone may be spying on you – but not how you suspect, *USA Today*
- 2018 Your Android Apps Are (Probably) Not Snooping on You, a New Study Says, *Fortune*
- 2018 Your phone isn't listening to you, researchers say, but it may be watching everything you do, *The Verge*
- 2018 These Academics Spent the Last Year Testing Whether Your Phone Is Secretly Listening to You, *Gizmodo*
- 2018 Bias detectives: the researchers striving to make algorithms fair, *Nature*
- 2018 Studies Are Increasingly Clear: Uber, Lyft Congest Cities, *The Associated Press*
- 2017 An insecure mess: How flawed JavaScript is turning web into a hacker's playground, *ZDNet*
- 2016 Studies Show Racial and Gender Discrimination Throughout the Gig Economy, *Bloomberg*
- 2016 Is the Gig Economy Rigged?, *MIT Tech Review*
- 2016 How an Old Hacking Law Hampers the Fight Against Discrimination, *The New Yorker*
- 2016 ACLU suing US over law that could let software discriminate by race or gender, *The Guardian*
- 2016 Does this cybercrime law actually keep us from fighting discrimination?, *The Washington Post*

2016 First Amendment Suit Claims Anti-Hacking Law Criminalizes Scholarly Research, *The Wall Street Journal*

2016 Algorithmic Pricing Is Creating An Arms Race On Amazon's Marketplace, *Fast Company*

2016 You're Paying Too Much on Amazon, Study Says, *Motherboard*

2015 Here's how you can avoid Uber surge pricing, *Fortune*

2015 Uber's Surge Pricing Doesn't Work the Way It's Supposed To, *Money*

2015 Uber Surge Price? Research Says Walk A Few Blocks, Wait A Few Minutes, *NPR All Tech Considered*

2015 SF Has More Surge Pricing Than NYC...And Other Findings From a New Uber Study, *SF Weekly*

2015 How to get around Uber's surge pricing, *New York Post*

2015 Uber's Surge Pricing May Not Lead to a Surge in Drivers, *ProPublica*

2015 Want to Avoid Uber Surge Pricing on Halloween? This Study Has Tips, *NBC News*

2015 Scientists Claim to Have Cracked How to Beat Uber's Surge Pricing Algorithm, *ABC News*

2015 Can Uber's surge pricing be gamed?, *The Telegraph*

2015 This map shows the Boston boundaries of Uber's surge pricing, *Boston Globe*

2015 Report says Uber surge pricing has a twist: some drivers flee, *San Francisco Chronicle*

2015 No one in control: The algorithms that run our lives, *New Scientist*

2014 Do companies charge online shoppers different prices?, *CBS Evening News*

2014 Online shopping yields different prices, results, says Northeastern study, *Boston Globe*

2014 Why You Can't Trust You're Getting the Best Deal Online, *Wall Street Journal*

2014 Holiday Travel Saving Secrets: Beware of Price Steering, *Good Morning America*

2014 How to Beat Online Price Discrimination, *Money*

2014 Want the best price online? Good luck with that, *NPR Marketplace*

2014 Online Personalization Means Prices Are Tailored To You, Too, *Scientific American*

2014 Guess What? You Aren't Always Seeing The Lowest Price, Study Says, *Forbes*

2014 How You Shop Online Changes The Prices You See, *Fast Company*

2014 How To Beat Online Price Discrimination, *Slashdot*

2014 Travelocity apparently saves the best deals for iOS shoppers, *Engadget*

2014 Study Will Make You Question Prices on Travel Websites, *Mashable*

2012 A dark force, unleashed online, *Boston Globe*

2011 Growing Number Of Cyber Shills Invade Online Reviews, *The Consumerist*

2011 Million Dollar Crowdturfing Industry Dupes Social Networks, *Slashdot*

2011 Hidden Industry Dupes Social Media Users, *MIT Technology Review*

2010 Dissecting Facebook Spam, *Wall Street Journal*

2010 Scrutinizing Facebook Spam, *MIT Technology Review*