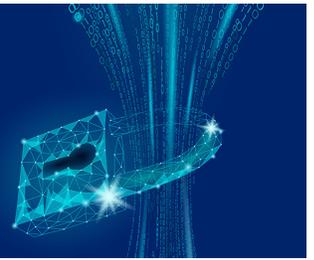


# Rice University Symposium on Data Privacy

Monday, January 28, 2019



- 1:00 – 1:10 pm **Welcome**  
**Bill Fulton**, Director, Kinder Institute for Urban Research, Rice University  
**Kathy Ensor**, Director, Urban Data Platform and Noah G. Harding Professor of Statistics, Rice University
- 1:10 – 1:45 pm **Keynote: Advancing Science, Protecting Privacy**  
**Deborah Frincke**, Director of Research, National Security Agency/Central Security Service
- 1:45 – 2:15 pm **The Double-Edged Sword of Data Privacy for University Researchers**  
**Marie Lynn Miranda**, Howard R. Hughes Provost and Professor of Statistics, Rice University
- 2:15 – 2:45 pm **Privacy and Incentives in Repeated Games**  
**Rachel Cummings**, Assistant Professor of Industrial and Systems Engineering and Computer Science, Georgia Tech
- 2:45 – 3:15 pm **Privacy and Integrity in Electronic Voting**  
**Dan Wallach**, Professor of Computer Science and Electrical and Computer Engineering, Rice University
- 3:15 – 3:30 pm **Break**
- 3:30 – 4:00 pm **Local Models of Privacy – Applications, Optimality and Challenges**  
**John Duchi**, Assistant Professor of Statistics, Stanford University
- 4:00 – 4:45 pm **Keynote: Privacy and the 2020 Census**  
**Simson Garfinkel**, Senior Computer Scientist for Confidentiality and Data Access, U.S. Census Bureau
- 4:45 – 5:15 pm **Q&A Panel Discussion**  
Moderator: **Rudy Guerra**, Professor of Statistics and Associate Department Chair, Rice University
- Closing Remarks**  
**Bill Fulton**, Director, Kinder Institute for Urban Research, Rice University
- 5:15 – 6:00 pm **Reception**



**JOIN THE CONVERSATION:** @RiceKinderInst @RiceK2I #PrivacyAware

## Kinder Institute for Urban Research

The Kinder Institute for Urban Research is a multidisciplinary think-and-do tank housed at Rice University in central Houston, focusing on urban issues in Houston, the American Sun Belt and around the world. Through informed research, data and policy analysis, the Kinder Institute hopes to engage civic and political leaders to implement solutions to critical urban issues. [kinder.rice.edu](http://kinder.rice.edu)

## Ken Kennedy Institute for Information Technology

The Ken Kennedy Institute for Information Technology is dedicated to the advancement of research in the fields of computing, data science and information technology. Its goal is to provide broad support for a strong community of research experimentation that challenges traditional disciplinary limits. [k2i.rice.edu](http://k2i.rice.edu)

## Urban Data Platform

The Urban Data Platform brings together hundreds of different datasets about Houston and surrounding areas in a secure computing environment. Housed on Rice University's secure servers, the Urban Data Platform is a system designed for storing, processing and analyzing public, and confidential, data from government, nonprofits and academia. [kinderUDP.org](http://kinderUDP.org)

**Rachel Cummings** is an assistant professor of industrial and systems engineering and computer science (by courtesy) at Georgia Tech. Her work has focused on problems such as strategic aspects of data generation, incentivizing truthful reporting of data, privacy-preserving algorithm design, impacts of privacy policy, and human decision-making. Cummings received her Ph.D. in computing and mathematical sciences from the California Institute of Technology, her M.S. in computer science from Northwestern University, and her B.A. in mathematics and economics from the University of Southern California. She is the recipient of a Google Research Fellowship, a Simons-Berkeley Research Fellowship in Data Privacy, a Mozilla Research Grant, the ACM SIGecom Doctoral Dissertation Honorable Mention, the Amori Doctoral Prize in Computing and Mathematical Sciences, a Caltech Leadership Award, a Simons Award for Graduate Students in Theoretical Computer Science, and the Best Paper Award at the 2014 International Symposium on Distributed Computing. Cummings also serves on the ACM U.S. Public Policy Council's Privacy Committee.

**John C. Duchi** is an assistant professor of statistics and electrical engineering and (by courtesy) computer science at Stanford University, with graduate degrees from UC Berkeley and undergraduate degrees from Stanford. His work focuses on large scale optimization problems arising out of statistical and machine learning problems, robustness and uncertain data problems, and information theoretic aspects of statistical learning. He has won a number of awards and fellowships, including best paper awards at the Neural Information Processing Systems conference, the International Conference on Machine Learning, an NSF CAREER award, a Sloan Fellowship in Mathematics, the Okawa Foundation Award, and the Association for Computing Machinery (ACM) Doctoral Dissertation Award (honorable mention).

**Deborah Frincke** is the National Security Agency/Central Security Service director of research. Frincke leads the NSA/CSS Research Directorate, arguably the largest "in-house" research organization in the U.S. Intelligence Community, to create breakthroughs in mathematics, science and engineering that support and enable the NSA/CSS. Under her guidance, the research directorate recruits personnel and maintains facilities that are world-class in fields as diverse as mathematics, computer science, cyber security/trustworthy computing, engineering, physics, neuroscience, cognitive psychology and linguistics. The highly technical workforce performs cutting-edge research – science that gives our nation the information advantage it needs to find creative solutions to its most vexing problems. As a world science and technology leader, the research directorate engages with leading industries, universities, and national laboratories to both advance core competencies and to leverage work in overlapping disciplines. Through NSA's Technology Transfer Program, the directorate licenses and shares internally developed technologies with industry, academia, and other government agencies. Formerly, the NSA/CSS associate director for education and training, Frincke leads the National Cryptologic School (NCS) as NCS commandant and manages a worldwide multiservice military and civilian, corporate-level learning organization to deliver education, training and career development to members of the NSA/CSS workforce. She is dual-hatted as the NSA/CSS training director, governing the Cryptologic Training Council and providing executive steering of four joint service schools and 20 satellite campuses across a global enterprise.

**Simson L. Garfinkel** is the senior computer scientist for confidentiality and data access at the U.S. Census Bureau. His current research interests include privacy in big data, cybersecurity and usability. He holds seven U.S. patents and has published dozens of research articles in computer security and digital forensics. He is a fellow of both the Association for Computing Machinery and the Institute of Electrical and Electronics Engineers, and a member of the National Association of Science Writers. Garfinkel is the author or co-author of 14 books. His book "Database Nation: The Death of Privacy in the 21st Century" (O'Reilly, 2000) discussed the impact of technology on privacy in the 20th- and 21st-centuries. His book "Practical UNIX and Internet Security" (co-authored with Gene Spafford and Alan Schwartz), has sold more than 250,000 copies and been translated into more than a dozen languages. Garfinkel is also a journalist and has written more than a thousand articles about science, technology and technology policy in the popular press since 1983. He has won several national journalism awards, including the Jesse H. Neal National Business Journalism Award. Today he mostly writes for MIT's Technology Review Magazine and the technologyreview.com website. As an entrepreneur, Garfinkel founded five companies between 1989 and 2000, including Vineyard.NET, which provided Internet service on Martha's Vineyard to more than a thousand customers from 1995 through 2005, and Sandstorm Enterprises, an early developer of computer forensic tools. Garfinkel received three Bachelor of Science degrees from MIT in 1987, a Master's of Science in journalism from Columbia University in 1988 and a Ph.D in computer science from MIT in 2005.

**Marie Lynn Miranda** specializes in research on environmental health, especially how the environment shapes health and well-being among children. She is a leader in the evolving field of geospatial health informatics and has studied, for example, the impact of racial residential segregation on health. She is the founding director of the Children's Environmental Health Initiative, a research, education and outreach program committed to fostering environments where all people can prosper. The initiative's peer-reviewed research has been cited extensively, including in the U.S. Environmental Protection Agency's integrated science assessment on revisions to the national ambient air quality standard for lead.

**Dan S. Wallach** is a professor in the Departments of Computer Science and Electrical and Computer Engineering and a Rice Scholar at the Baker Institute for Public Policy at Rice University. His research considers a variety of topics in computer security, including electronic voting systems security, where he served as the director of an NSF-funded multi-institution research center, ACCURATE (A Center for Correct, Usable, Reliable, Auditable, and Transparent Elections), from 2005-2011. He has also served as a member of the Air Force Science Advisory Board (2011-2015) and the USENIX Association Board of Directors (2011-2013). Wallach earned his M.A. (1995) and PhD (1999) from Princeton University, advised by Profs. Edward Felten and Andrew Appel. He earned his B.S. EE/CS from the University of California, at Berkeley (1993).