

Rebecca Hunt Balebako

Summary: Privacy expert with technical and academic experience

- Privacy experience in usability, public policy, red teaming
- Software Engineering: >10 years experience, languages include Java, Python (pandas, numpy)

Professional Experience

Senior Privacy Engineer August 2018 -present Google Switzerland, Zurich

Technical lead and manager for privacy red team. Use security techniques to evaluate and analyze user privacy. Lead development of techniques and procedures in collaboration with legal teams and offensive security teams.

Information Scientist January 2015 -July 2018 RAND Corporation, Pittsburgh, PA

Lead policy-relevant research on privacy and security. Present findings and abstract concepts to audiences including government agencies, defense agencies, and criminal justice communities.

Product Manager 2009-2010 Tradenet (Esoko), Accra, Ghana

Led collaborative effort between software, QA, and marketing teams. Designed product specifications for mobile and web applications.

ICT Advisor 2007-2009 Peace Corps Small Enterprise Development Program, Togo

Directed projects using information and communication technology to further community's goals.

Software Engineer 2004-2007 Stanford University, Global Climate and Energy Project, Stanford, CA

Lead of website and model development for climate research group. Developed and managed software toolkit for analysis of energy systems.

Web Programmer and Developer 2001-2004 Harvard University, Faculty of Arts and Sciences Web Team, Cambridge, MA

Developed multiple high priority and high demand web applications. Led integration of unit testing and usability tests, as well as transfer to cvs

Web and Software Developer 1997-2001 Various startups, Boston, MA

Additional Skills and Certificates

- Manager and technical lead: successfully led multi-disciplinary, multi-cultural teams in software development and technical policy analysis
- Privacy: user experience research (interviews, surveys, field experiments), public policy analysis (policy risk and communication), IAPP (E and PM) certifications, anonymization (differential privacy, k-anon),
- Software Engineering: >10 years experience, languages include Java, Python
- Machine Learning and Data Analysis: Columbia Executive Education Certificate in Applied Machine Learning, expected March 2023

Selected Publications

“Face recognition technologies: Designing systems that protect privacy and prevent bias”

D Yeung, **R Balebako**, CIG Gaviria, M Chaykowsky RAND 2020

“Nudges for Privacy and Security: Understanding and Assisting Users’ Choices Online”

Acquisti, A., Adjerid, I., **Balebako, R.**, Brandimarte, L., Cranor, L.F., Komanduri, S., Leon, P.G., Sadeh, N., Schaub, F., Sleeper, M. and Wang, Y., *ACM Computing Surveys*

“Designing Effective Privacy Notices and Controls”

Schaub, F., **Balebako, R.**, and Cranor L. *In IEEE Internet Computing May/June 2017 - Usable Security*

“Can Smartphones and Privacy Coexist? Assessing Technologies and Regulations Protecting Personal Data on Android and iOS Devices”

Yerukhimovich, A., **Balebako, R.**, Boustead, A., Cunningham, R.K., Welsler IV, W., Housley, R., Shay, R., Spensky, C., Stanley, K.D., Stewart, J. and Trachtenberg, A., *Santa Monica, CA: RAND Corporation, 2016.*

“The Impact of Timing on the Saliency of Smartphone App Privacy Notices” **Balebako, R.**, Schaub, F., Adjerid, I., Acquisti, A., Cranor, L. *5th Annual ACM CCS Workshop on Security and Privacy in Smartphones and Mobile Devices (SPSM)*, 2015, ACM

“A Design Space for Effective Privacy Notices”

Schaub, F., **Balebako, R.**, Durity A., and Cranor L. *In Proc. of the 2015 Symposium on Usable Privacy and Security* (Winner, Future of Privacy Forum’s Privacy Papers for Policy Makers)

“Variations in Tracking in Relation to Geographic Location”

Fruchter, N., Miao, H., Stevenson, S, **Balebako, R.**, *IEEE Security & Privacy Workshop on Web 2.0 for Security and Privacy 2015*

“Is Notice Enough: Mitigating the Risks of Smartphone Data Sharing”

Balebako, R., Bravo-Lillo, C., Cranor, L. *I/S: A Journal of Law and Policy for the Information Society, Volume 11, Issue 2, Summer 2015*

“The Privacy and Security Behaviors of Smartphone App Developers”

Balebako, R., Marsh, A., Lin, J., Hong, J., Cranor, L. *2014 NDSS Workshop on Usable Security (USEC)*

“Improving App Privacy: Nudging App Developers to Protect User Privacy”

Balebako, R., Cranor, L., *IEEE Security & Privacy*, vol.12, no. 4, pp. 55-58, July-Aug. 2014

“Is Your Inseam a Biometric? A Case Study on the Role of Usability Studies in Developing Public Policy”

Balebako, R., Shay, R., Cranor, L. *2014 Workshop on Usable Security (USEC)*

“Measuring the Effectiveness of Privacy Tools for Limiting Behavioral Advertising”

Balebako, R., Leon, P., Shay, R., Ur, B., Wang, Y. and Cranor L. , *IEEE Security & Privacy Workshop on Web 2.0 for Security and Privacy 2012*

“‘Little Brothers Watching You:’ Raising Awareness of Data Leaks on Smartphones”

Balebako, R., Jung, J., Lu, W., Cranor, L., Nguyen, C., *In Proc. of the 2013 Symposium on Usable Privacy and Security*

“What Matters to Users? Factors that Affect Users’ Willingness to Share Information with Online Advertisers”

Leon, P., Ur, B., Wang, Y., Sleeper, M., **Balebako, R.**, Shay, R., Bauer, L., Christodorescu, M., Cranor, L. *In Proc. of the 2013 Symposium on Usable Privacy and Security*

“The post that wasn’t: Exploring self-censorship on Facebook.”

Sleeper, M., **Balebako, R.**, Das, S., McConahy, A., Wiese, J., and Cranor, L. *Proc. of Computer Supported Collaborative Work (2013)*.

“Why Johnny Can’t Opt Out: A Usability Evaluation of Tools to Limit Online Behavioral Advertising.”

Leon, P., Ur, B., **Balebako, R.**, Cranor, L., Shay, R., and Wang, Y. *Proc. of CHI 2012 (Best Paper, Honorable Mention)*

Education

Carnegie Mellon University, Engineering and Public Policy PhD Engineering and Public Policy, December 2014

Thesis: *Identifying and Communicating the Risks of Smartphone Data Sharing*

Harvard University Extension School, Cambridge, MA.

Masters in Liberal Arts (A.L.M.) in Software Engineering, November 2004

Thesis: *Using Distributed Computing to solve the 0-1 Knapsack Problem*

Mount Holyoke College, South Hadley, MA.

Bachelors (B.A.) cum laude

Majors: Mathematics and Asian Studies

Teaching Experience

Adjunct Professor, Carnegie Mellon University:

- *Engineering Privacy in Software* Spring 2017, 2018 Instructor for masters-level course
- *Privacy, Policy, Law, and Technology* Fall 2015, 2017 Co-taught interdisciplinary course on technology and policy.

Teaching Assistant, Carnegie Mellon University:

- *Privacy, Policy, Law, and Technology* Fall 2014
- *Engineering Privacy in Software*, Spring 2014
- *Privacy in the Digital Age* Fall 2013
- *Engineering and Public Policy 101* Spring 2013

Academic Service

- Committee Member, Symposium on Usable Privacy and Security 2018, 2021-2023
- Committee Member, NDSS Workshop on Usable Security (USEC) 2014, 2015
- Committee Member, ACM CHI Conference on Human Factors in Computing Systems, 2014
- Reviewer: CHI 2011-2016, 2019, Human Robot Interaction 2016

Languages

English -Native, French - B1, German - B1 certificate (B2 coursework ongoing)