

# Ashia C. Wilson

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## IDENTIFYING DATA

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WWW: <https://aswilson07.github.io/website>

## ACADEMIC HISTORY

### University of California, Berkeley

Ph.D., *Statistics*

2012-2018

Advisors: *Professors Michael I. Jordan and Benjamin Recht*

### Harvard University

Bachelor, *Applied Mathematics* (with honors)

2007-2011

## EMPLOYMENT RECORD

**MIT**, *Assistant Professor of Electrical Engineering and Computer Science*

2021

**Microsoft Research**, *Postdoctoral Researcher*

2018-2020

**Google AI**, *Summer Intern with Yoram Singer*

2017-2018

**MIT**, *Research Assistant in Prediction Analysis Lab with Professor Cynthia Rudin*

2017-2018

## PROFESSIONAL EXPERIENCE

**Co-President:** UC Berkeley's Statistics Graduate Student Association

2016

### University of California, Berkeley Graduate Instructor

EE227C: Optimization for Modern Data Analysis

2015

Stat154: Modern Statistical Prediction and Machine Learning

2015

### Reviewer

Neural Information Processing Systems (2017, 2020),  
Journal of Machine Learning Research (2019).

## AWARDS AND HONORS

NeurIPS '17 spotlight paper award for

2017

*The Marginal Value of Adaptive Methods in Machine Learning*

Rising Stars in EECS, *Invited Participant*

2017

National Science Foundation Graduate Research Fellowship

2014-2017

UC Berkeley Chancellors Fellowship

2012-2014

GEM Fellowship

Harvard Fung Fellowship

2010

Best Paper, MERIT Research Program at University of Maryland

2009

## PUBLICATIONS

### Refereed Journal Publications

Broderick, T., Wilson, A. C., and Jordan, M. I. (2018). Posteriors, conjugacy, and exponential families for completely random measures. *Bernoulli*.

Wibisono, A., Wilson, A. C., and Jordan, M. I. (2016). A variational perspective on accelerated methods of optimization. *Proceedings of the National Academy of Science (PNAS)*.

### Refereed Conferences/Symposia Proceedings

Wilson, A. C., Kasy, M., and Mackey, L. (2020). Approximate cross-validation: guarantees for model assessment and selection. *To appear at the 23rd International Conference on Artificial Intelligence and Statistics (AISTATS)*.

Liu, L. T., Wilson, A. C., Haghtalab, N., Kalai, A. T., Borgs, C., and Chayes, J. (2020). The disparate equilibria of algorithmic decision making when individuals invest rationally. *ACM conference on Fairness, Accountability and Transparency (FAT\*)*.

Wilson, A. C., Mackey, L., and Wibisono, A. (2019). Accelerating rescaled gradient descent: fast minimization of smooth functions. *In Advances in Neural Information Processing Systems (NeurIPS)*, 31.

Wilson, A. C., Roelofs, R., Stern, M., Srebro, N. and Recht, B. (2017). The marginal value of adaptive methods in machine learning. *In Advances in Neural Information Processing Systems (NeurIPS)*, 29. **(Awarded Spotlight Presentation)**

Tu S., Venkataraman, S., Wilson, A. C., Jordan, M.I. and Recht, B. (2017). Breaking locality accelerates block Gauss-Seidel. *In the International Conference of Machine Learning (ICML)*, 34.

Broderick, T., Boyd, N., Wibisono, A., Wilson, A. C., and Jordan, M. I. (2014). Streaming variational Bayes. *In Advances in Neural Information Processing Systems (NeurIPS)*, 26.

### Preprints

Wilson, A. C., Recht, B. and Jordan, M. I. (2016). A Lyapunov analysis of momentum methods in optimization. *Under Review*.

Betancourt, M., Jordan, M. I. and Wilson A. C. (2017). On symplectic optimization.

## PRESENTATIONS

### Invited Plenary Talks

Caltech Young Investigator Lecturer in Engineering and Applied Science **2017**

### Other Invited Presentations

UC Berkeley Rise Lab **2017**

UC Berkeley BSTARs **2017**

UC Berkeley Amp Camp **2014**

### Workshop and Conference Presentations

Optimization and Statistical Learning (OSL), Les Houches **2019**

57 <sup>th</sup> IEEE Conference on Decision and Control, Miami Beach	2018
Information Theory and Applications Workshop (ITA)	2017
SIAM Conference on Optimization (OP17)	2017
Cornell Young Research Workshop	2017

#### **Department Seminars**

Johns Hopkins: Invited Seminar, Mathematical Institute for Data Science (MINDS)	2020
Rice: Invited Seminar, Computational and Applied Mathematics	2020
University of Maryland: Invited Seminar, Computer Science	2020
Cornell: Invited Seminar, Operations Research and Information Engineering	2020
Yale: Invited Seminar, Computer Science	2020
Brown: Invited Seminar, Computer Science	2020
New York University: Invited Seminar, Computer Science	2020
University of Chicago: Invited Seminar, Computer Science	2020
Carnegie Mellon University: Invited Seminar, Computer Science	2020
Georgia Tech: Invited Seminar, Computer Science	2020
Stanford: Invited Seminar, Computer Science and Management Science & Engineering	2020
UMass Amherst: Special Seminar, Applied Mathematics	2019
MIT Operations Research Seminar	2019
ETH, Zurich Statistics Seminar Series	2019
Georgia Tech ISYE Seminar	2018
MIT LIDS Seminar	2018
TTIC Young Researcher Seminar Series	2017
Microsoft Research Theory Group, Seattle	2017