

# Adam Bloniarz

[www.stat.berkeley.edu/~adam](http://www.stat.berkeley.edu/~adam)

[adam@stat.berkeley.edu](mailto:adam@stat.berkeley.edu)

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## EDUCATION

Ph.D. in Statistics with Designated Emphasis in Computational Data Science and Engineering, UC Berkeley, 2016

M.S. in Statistics, UC Berkeley, 2013

Master of Music, Yale School of Music, 2007

B.S. in Mathematics and Music (double major), *magna cum laude*, Yale College, 2005

## EXPERIENCE

Software Engineering Intern, Google, Mountain View, CA, Summer 2015

- Statistical modeling of large distributed datasets
- Delivered internal tech talk on my project to product managers and engineers

Research Assistant, UC Berkeley AMPLab, Summer 2014

- Research in bioinformatics and scalable machine learning

Visiting researcher, LEAR Project-team, INRIA Grenoble, France, July 2013 & May 2016

- Research in computational neuroscience and computer vision

Analyst, Analytic Partners, New York, NY, 2010-2011

- Market mix modeling for clients in the consumer package goods industry

Technician, Albert Einstein College of Medicine, Bronx, NY, 2009-2010

- Data analyst in the neuroscience lab of Dr. Scott Emmons

Fellow, Bard College Conservatory of Music, Annandale-on-Hudson, NY 2007-2009

- Piano instructor, music theory teacher, and accompanist

## PAPERS AND PREPRINTS

Adam Bloniarz, Christopher Wu, Bin Yu and Ameet Talwalkar. "Supervised neighborhoods for distributed nonparametric regression." In *Proceedings of the 19th International Conference on Artificial Intelligence and Statistics*, 2016: 1450-1459.

Adam Bloniarz<sup>†</sup>, Hanzhong Liu<sup>†</sup>, Cun-Hui Zhang, Jasjeet Sekhon, and Bin Yu. "Lasso adjustments of treatment effect estimates in randomized experiments." Accepted, *Proceedings of the National Academy of Sciences*. *arXiv preprint arXiv:1507.03652* (2015).

Adam Bloniarz<sup>†</sup>, Ameet Talwalkar<sup>†</sup>, Jonathan Terhorst<sup>†</sup>, Michael I. Jordan, David Patterson, Bin Yu, and Yun S. Song. "Changepoint Analysis for Efficient Variant Calling." *Research in Computational Molecular Biology (RECOMB)*. Springer International Publishing, 2014: 20-34

Travis A. Jarrell<sup>†</sup>, Yi Wang<sup>†</sup>, Adam E. Bloniarz, Christopher A. Brittin, Meng Xu, J. Nichol Thomson, Donna G. Albertson, David H. Hall, and Scott W. Emmons. "The Connectome of a Decision-Making Neural Network." *Science* 337, no. 6093 (2012): 437-444.

- Awarded the Newcomb Cleveland Prize from the American Association for the Advancement of the Sciences for an outstanding paper in the journal *Science*.

<sup>†</sup> Denotes joint first authors

## AWARDS AND FELLOWSHIPS

Erich Leo Lehmann Citation for an outstanding Ph.D. dissertation in theoretical statistics, UC Berkeley, 2016

Outstanding Graduate Student Instructor Award, UC Berkeley, 2013

National Defense Science and Engineering Graduate Fellowship, 2013-2016

Power Graduate Award, UC Berkeley, 2011

Deforest Senior Prize in Mathematics, 2005, Yale College

Wrexham Prize in Music, 2005, Yale College

Anthony D. Stanley Prize in Mathematics, 2003-2004, Yale College

Phi Beta Kappa, 2004

## INVITED TALKS

"Distributed Random Forests"

- Invited Session on "Big Data Issues in Biosciences" at the Joint Statistical Meetings, Seattle, Washington, August 2015
- Applied Statistics Group, Lawrence Livermore National Lab, July 2015
- Bay Area Chapter of the American Statistical Association, May 2015

"CAGe: A hybrid pipeline for efficient variant calling," Berkeley Statistics Annual Research Symposium, March 2014

"Complex network statistics of the *C. elegans* nervous system" Presented to the Hobert Lab in the Columbia University Department of Biochemistry and Molecular Biophysics, September 2010

"Statistical methods for analyzing neural connectivity in the *C. elegans* nervous system" Neuronal development, synaptic function, and behavior: *C. elegans* topic meeting, July 2010, Madison, WI

## **POSTER PRESENTATIONS**

“Comparing image representations for modeling of the visual cortex,” Center for the Science of Information NSF Site Visit, Purdue University, December 2014

“Modeling area MT neurons with invariance principles and sparse coding,” Data Science Faire, Berkeley Institute for Data Science, December 2013

“Modeling neuronal response to natural stimuli with invariant representations,” with Yuval Benjamini, Center for the Science of Information Research Workshop, Purdue University, December 2012

## **TEACHING EXPERIENCE**

Teaching Assistant, UC Berkeley Statistics Department

- Graduate Applied Statistics, Fall 2013
- Undergraduate Statistical Computing, Spring 2013

Teaching Assistant, Institute for Mathematics and its Applications, June 2013

- New Directions Short Course on Applied Statistics and Machine Learning

## **ACADEMIC SERVICE**

Reviewer for the *Journal of Statistical Software*, Asia Pacific Bioinformatics Conference

Co-President of the UC Berkeley Statistics Graduate Student Association, 2013 - 2014

## **GRADUATE COURSEWORK**

Probability theory, Mathematical statistics, Applied statistics, Causal inference in the social sciences, Statistical learning theory, Applications of parallel computers

## **PROGRAMMING LANGUAGES**

R, C++, Scala, Python, MATLAB