Ryan J. Giordano

Contact Information

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Education

Massachusetts Institute of Technology, Cambridge, MA USA
Department of EECS, Computer Science & Artificial Intelligence Lab
Postdoctoral Research Fellow. Advisor: Tamara Broderick — 2019–present

University of California, Berkeley, CA USA
Ph.D., Statistics. Advisors: Michael I. Jordan, Jon McAuliffe, Tamara Broderick — 2013–2019

London School of Economics, London, UK
MSc., Econometrics. — 2007–2009

University of Illinois, Urbana-Champaign, IL, USA
BA., Mathematics. — 1997–2002
BS., Theoretical and Applied Mechanics. — 1997–2002

Professional Experience

Google Inc., Mountain View, CA USA
Senior Engineer, Quantitiative Analysis — 2009-2013

Macquarie Group, London, UK
Risk Management Intern — 2008

United States Peace Corps, Kokshetau, KZ
Education Volunteer, successful completion of service — 2004-2006

Hewlett-Packard, Boise, ID
Lifetest Coordinator and Reliability Engineer — 2002-2004

Honors and Awards

Notable Paper Award, Artificial Intelligence and Statistics (AISTATS) (2019)
Travel Award, Artificial Intelligence and Statistics (AISTATS) (2019)
Travel Award, Bayesian Nonparametrics Conference (2019)
Student Paper Award, ASA Section on Bayesian Statistical Science (2018)
Travel Award, International Society for Bayesian Analysis (ISBA) (2018)
Berkeley Institute for Data Science Fellow (2017-19)
Junior Travel Support Grant, International Society for Bayesian Analysis (ISBA) Bayes-Comp (2016)
Spotlight Paper, Neural Information Processing Systems (NeurIPS) (2015)
Outstanding Graduate Student Instructor Award (2015)
Travel Award, Neural Information Processing Systems Workshop on Variational Inference (2014)
Hertz Foundation Graduate Fellowship Finalist (2014)
Google Operating Committee Award (2010)
Advanced-high speaker of Russian in Peace Corps Aptitude Test (2006)
Advanced-mid speaker of Kazakh in Peace Corps Aptitude Test (2006)
Selected as a Peace Corps "Success Story" for a congressional report (2005)
Best Project, Undergraduate Mechanics Research Conference (2002)
Best Presentation, Undergraduate Mechanics Research Conference (2002)
Seely, Sinclair, Stippes, TAM Merit Scholarships (1998-2002)

Preprints

R. J. Giordano, M. I. Jordan, & T. Broderick (2019). A Higher-Order Swiss Army Infinitesimal Jackknife. *arXiv:1907.12116 [stat.ME].* [pdf]

Publications

R. J. Giordano, W. Stephenson, R. Liu, M. I. Jordan, T. Broderick (2019). A Swiss Army Infinitesimal Jackknife. In *The 22nd International Conference on Artificial Intelligence and Statistics.* [pdf]

R. J. Giordano, T. Broderick, & M. I. Jordan (2018). Covariances, Robustness, and Variational Bayes. In *Journal of Machine Learning Research.* [pdf]

J. Regier, K. Fischer, K .Pamnany, A. Noack, J. Revels, M. Lam, S. Howard, **R. J. Giordano**, D. Schlegel, J. McAuliffe, R. Thomas (2019). Cataloging the visible universe through Bayesian inference in Julia at petascale. In *Journal of Parallel and Distributed Computing.* [pdf]

J. Regier, K. Pamnany, K. Fischer, A. Noack, M. Lam, J. Revels, S. Howard, **R. J. Giordano**, D. Schlegel, J. McAuliffe, R. Thomas, Prabhat (2018). Cataloging the Visible Universe through Bayesian Inference at Petascale. In *IEEE International Parallel and Distributed Processing Symposium (IPDPS). IEEE, 2018.* [pdf]

R. J. Giordano, T. Broderick, & M. I. Jordan (2015). Linear Response Methods for Accurate Covariance Estimates from Mean Field Variational Bayes. In *Advances in Neural Information Processing Systems.* [pdf]

R. Winther, **R. J. Giordano**, M. D. Edge, and R. Nielsen (2015). The Mind, the Lab, and the Field: Three Kinds of Populations in Scientific Practice. In *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences.* [pdf]

Workshop Papers

R. Liu *, **R. J. Giordano** *, M. I. Jordan, T. Broderick (2018). Evaluating Sensitivity to the Stick Breaking Prior in Bayesian Nonparametrics. In *NeurIPs 2018 Bayesian Nonparametrics Workshop.* [pdf]

R. J. Giordano *, R. Liu *, N. Varoquaux*, M. I. Jordan, T. Broderick (2017). Measuring Cluster Stability for Bayesian Nonparametrics Using the Linear Bootstrap. In *NeurIPs 2017 Advances in Approximate Bayesian Inference Workshop.* [pdf]

R. J. Giordano, T. Broderick, R. Meager, J. Huggins, M. I. Jordan (2016). Fast Robustness Quantification with Variational Bayes. In *2016 ICML Workshop on #Data4Good: Machine Learning in Social Good Applications.* [pdf]

$\star$ = contributed equally

Invited Talks

Using Bagged Posteriors for Robust Inference

Northeastern University, Boston, MA — February 2020
SPIRAL Seminar Series

Oxford University, Oxford, UK — October 2019
Statistics Seminar

Contributed Talks

Professional Service

Student Leadership

University of California, Berkeley, Statistics Department

- Diversity Taskforce Member — 2018-2019

- Graduate Student Mentor 2017-2019
- Diversity Committee Member 2017
- Co-organizer of the Gender and Diversity Roundtable 2016-2018
- Student Seminar Committee Member 2014-2017

Univeristy of Illinois, Urbana-Champaign, Engineering Mechanics Department
- President, Student Society for Experimental Mechanics 2000-2002
- Organizer, Free University Opera for Engineering Students 2001-2002

Journal Reviewing
- Journal of Machine Learning Research

Conference Reviewing
- Advances in Neural Information Processing Systems (NeurIPS)
- International Conference on Machine Learning (ICML)
- International Conference on Artificial Intelligence and Statistics (AISTATS)

Teaching

University of California, Berkeley, USA
- Teaching Assistant, STAT215 Applied Statistics (Graduate-level) Fall 2014

Kokshetau Elementary School #3, Kokshetau, Kazakhstan
- Elementary school teacher of mathematics and English as a second language 2004-2006

University of Illinois, Urbana-Champaign, USA
- Teaching Assistant, Mechanics of Materials Lab Fall 1999
- Teaching Assistant, Introduction to Statics Spring 1999