

Ryan J. Giordano

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| CONTACT INFORMATION | 1515 Grant St. Berkeley, CA, 94703 USA | ✉ rgiordan@mit.edu 🌐 rgiordan.github.io ☎ (805) 501-6754 | |
| EDUCATION | Massachusetts Institute of Technology , Cambridge, MA USA <i>Department of EECS, Computer Science & Artificial Intelligence Lab</i> 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. BS., Theoretical and Applied Mechanics. | | 1997–2002 1997–2002 |
| PROFESSIONAL EXPERIENCE | Google Inc. , Mountain View, CA USA Senior Engineer, Quantitative 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) | | |

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| PREPRINTS | <ul style="list-style-type: none"> • T. D. Nguyen, R. J. Giordano, L. Masoero, L. Mackey & T. Broderick (2020). Independent finite approximations for Bayesian nonparametric inference: construction, error bounds, and practical implications. <i>arXiv:2009.10780 [stat.ME]</i>. [pdf] | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PUBLICATIONS | <p>20. A. K. Dhaka, A. Catalina, M. R. Andersen, M. Magnusson, R. J. Giordano, A. Vehtari (2020). Robust, Accurate Stochastic Optimization for Variational Inference In <i>Proc. of the 34th Annual Conference on Neural Information Processing Systems (NeurIPS)</i>. [pdf]</p> <p>19. R. J. Giordano, M. Kasprzak, T. C. Campbell & T. Broderick (2020). Practical posterior error bounds from variational objectives. In <i>Proc. of the 22nd International Conference on Artificial Intelligence and Statistics (AISTATS)</i>. [pdf]</p> <p>★ = contributed equally</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WORKSHOP PAPERS | <p>3. B. Trippe, R. J. Giordano & T. Broderick (2018). Fast Bayesian Inference in GLMs with Low Rank Data Approximations. In <i>Symposium on Advances in Approximate Bayesian Inference</i>.</p> <p>2. R. J. Giordano, L. Masoero, L. Mackey & T. Broderick (2017). Generic finite approximations for practical Bayesian nonparametrics. In <i>NeurIPS 2017 Workshop on Advances in Approximate Bayesian Inference</i>.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MISCELLANEA | <p>3. R. J. Giordano, M. Kasprzak, T. C. Campbell & T. Broderick (2018). Practical bounds on the error of Bayesian posterior approximations: A nonasymptotic approach. <i>arXiv:1809.09505 [stat.TH]</i>. [pdf]</p> <p>2. R. J. Giordano, A. Saeedi & M. J. Johnson (2014). Detailed Derivations of Small-variance Asymptotics for some Hierarchical Bayesian Nonparametric Models. <i>arXiv:1501.00052 [stat.ML]</i>. [pdf]</p> <p>1. R. J. Giordano & F. Wood (2014). Infinite structured hidden semi-Markov models. <i>arXiv:1407.0044 [stat.ME]</i>. [pdf]</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| INVITED TALKS | <p>Previous</p> <p><i>Using Bagged Posteriors for Robust Inference</i></p> <table> <tr> <td>Northeastern University, Boston, MA</td> <td>February 2020</td> </tr> <tr> <td colspan="2">SPIRAL Seminar Series</td> </tr> <tr> <td>Oxford University, Oxford, UK</td> <td>October 2019</td> </tr> <tr> <td colspan="2">Statistics Seminar</td> </tr> <tr> <td>Bristol University, Bristol, UK</td> <td>October 2019</td> </tr> <tr> <td colspan="2">Data Science Seminar</td> </tr> <tr> <td colspan="2">Statistics Seminar</td> </tr> <tr> <td>Massachusetts Institute of Technology, Cambridge, MA</td> <td>November 2019</td> </tr> <tr> <td colspan="2">Doctoral Seminar in Statistics</td> </tr> <tr> <td>Broad Institute of MIT and Harvard, Cambridge, MA</td> <td>December 2019</td> </tr> <tr> <td colspan="2">Models, Inference, and Algorithms</td> </tr> </table> <p><i>Scalable, Reliably Accurate Bayesian Inference via Approximate Likelihoods and Random Features</i></p> <table> <tr> <td>Google AI, Cambridge, MA</td> <td>February 2019</td> </tr> <tr> <td>Broad Institute of MIT and Harvard, Cambridge, MA</td> <td>February 2019</td> </tr> <tr> <td>Northeastern University, Boston, MA</td> <td>February 2019</td> </tr> </table> | Northeastern University, Boston, MA | February 2020 | SPIRAL Seminar Series | | Oxford University, Oxford, UK | October 2019 | Statistics Seminar | | Bristol University, Bristol, UK | October 2019 | Data Science Seminar | | Statistics Seminar | | Massachusetts Institute of Technology, Cambridge, MA | November 2019 | Doctoral Seminar in Statistics | | Broad Institute of MIT and Harvard, Cambridge, MA | December 2019 | Models, Inference, and Algorithms | | Google AI, Cambridge, MA | February 2019 | Broad Institute of MIT and Harvard, Cambridge, MA | February 2019 | Northeastern University, Boston, MA | February 2019 |
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| SPIRAL Seminar Series | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | Boston University, Boston, MA | January 2019 |
| | <i>Finite-dimensional Approximations of Completely Random Measures</i> | |
| | Stochastic Processes and Applications (SPA), Gothenburg, Sweden | June 2018 |
| | <i>Scaling Bayesian Inference by Constructing Approximating Exponential Families</i> | |
| | Boston Bayesian Meetup, Boston, MA | April 2018 |
| | Schlumberger Doll Research, Cambridge, MA | April 2018 |
| | Raytheon BBN Technologies, Cambridge, MA | February 2018 |
| CONTRIBUTED TALKS | Previous | |
| | <i>Using Bagged Posteriors for Robust Inference</i> | |
| | Bayes Comp, Gainesville, FL | January 2020 |
| | <i>Robustness and scalability of Bayesian nonnegative matrix factorization</i> | |
| | Joint Statistical Meeting (JSM), Denver, CO | July 2019 |
| | <i>Scaling Bayesian Inference by Constructing Approximating Exponential Families</i> | |
| | ISBA World Meeting, Edinburgh, Scotland | June 2018 |
| | <i>Truncated Random Measures</i> | |
| | 11th Conference on Bayesian Nonparametrics (BNP11), Paris, France | June 2017 |
| PROFESSIONAL SERVICE | Journal Reviewing | |
| | <ul style="list-style-type: none"> Journal of Machine Learning Research | |
| | Conference Reviewing | |
| | <ul style="list-style-type: none"> Advances in Neural Information Processing Systems (NeurIPS) International Conference on Machine Learning (ICML) International Conference on Artificial Intelligence and Statistics (AISTATS) | |
| TEACHING | <i>University of California, Berkeley, USA</i> | |
| | <ul style="list-style-type: none"> Teaching Assistant, STAT215 Applied Statistics (Graduate-level) | Fall 2014 |
| | <i>Kokshetau Elementary School #3, Kokshetau, Kazakhstan</i> | |
| | <ul style="list-style-type: none"> Elementary school teacher of mathematics and English as a second language | 2004-2006 |
| | <i>University of Illinois, Urbana-Champaign, USA</i> | |
| | <ul style="list-style-type: none"> Teaching Assistant, Mechanics of Materials Lab Teaching Assistant, Introduction to Statics | Fall 1999 Spring 1999 |