

Runjing (Bryan) Liu

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Education

UC Berkeley; Berkeley, CA

August 2016 to August 2021

PhD, Statistics

Advisor: Jon McAuliffe

Duke University; Durham, NC

August 2012 to May 2016

Major: Mathematics (BS), Minor: Biology

GPA: 3.99/4.00

Summa cum laude

Graduation with high distinction

Awards and Fellowships:

NSF graduate research fellow 2017

Julia Dale Prize in mathematics 2016

Barry Goldwater Scholarship Honorable Mention 2015

Phi Beta Kappa Academic Honor Society

Publications and pre-prints:

Giordano R., **Liu R.**, Jordan M. I., Broderick T. "Evaluating Sensitivity to the Stick-Breaking Prior in Bayesian Nonparametrics." *Bayesian Analysis* 18(1): 287-366, 2023. <https://arxiv.org/abs/1810.06587>.

Liu R., McAuliffe J. D., Regier J. "Variational Inference for Deblending Crowded Starfields." *Journal of Machine Learning Research* 24(179):1-36, 2023. <https://jmlr.org/papers/v24/21-0169.html>.

Giordano R., Stephenson W., **Liu R.**, Jordan M. I., Broderick T. "Return of the Infinitesimal Jackknife." *Conference on Artificial Intelligence and Statistics*. April 2019. <https://arxiv.org/pdf/1806.00550.pdf>.

-- selected for Notable Paper Award and oral presentation

Liu R., Giordano R., Jordan M. I., Broderick T. "Evaluating Sensitivity to the Stick Breaking Prior in Bayesian Nonparametrics." *NIPS, All of Bayesian Nonparametrics workshop*. December 2018. <https://arxiv.org/pdf/1810.06587.pdf>.

-- selected for the ISBA@NIPS Award

-- selected for contributed talk

Giordano R., **Liu R.**, Varoquaux N., Jordan M. I., Broderick T. "Measuring Cluster Stability for Bayesian Nonparametrics Using the Linear Bootstrap." *NIPS, Advances in Approximate Bayesian Inference Workshop*. December 2017. <https://arxiv.org/pdf/1712.01435.pdf>.

Liu R., Layton, A. "Modeling the Effects of Positive and Negative Feedback in Kidney Blood Flow Control." *Mathematical Biosciences*. June 2016: Vol. 276, pp 8-18.

Liu R., Patel, M., Badal, J. "Encoding whisker deflection velocity within the rodent barrel cortex using phase-delayed inhibition." *Journal of Computational Neuroscience*. December 2014: Vol. 37, Issue 3, pp 387-401.

Work experience:

Member of research staff at The Voleon Group. *Fall 2021 to present.*

Research intern at The Voleon Group. *Summer 2020.* Time series modeling of fixed income securities.

Data Science Intern at Google Cloud. *Summer 2019.* Worked on demand forecasting for Google data centers, and specifically on the development of general-purpose, validated prediction intervals.

Teaching:

Linear modeling: theory and applications. Graduate student instructor. *Fall 2018*

-- selected as Outstanding Graduate Student Instructor.

Introduction to time series. Graduate student instructor. *Spring 2019*

Skills:

Proficient in Python and R.

Other:

Berkeley **Statistics Graduate Student Association** co-president, *Fall 2018-Spring 2019*

Gave a student talk at the bi-annual **Berkeley Stanford Joint Statistics Colloquium**, *Fall 2017*

Middle school math tutor for **Bridging Berkeley**, *Fall 2017*

Chaired workshop for the NSF graduate fellowship application, *Fall 2017*

Co-organizer for **Berkeley Datafest**, *Spring 2017, 2018*

TA for **Duke TIP** in a number theory and cryptology course, *Summer 2015 and Summer 2016*