

# Ruqi Zhang

325, Gates Hall, Cornell University  
Ithaca, 14850, NY  
☎ (607)262-1821  
✉ rz297@cornell.edu  
📁 ruqizhang.github.io

## Education

- 2016–Now **PhD, Statistics; Special MS, Computer Science**, *Cornell University, Ithaca, NY*.  
Advisor: Christopher De Sa, Committee Members: Thorsten Joachims, Giles Hooker  
GPA: 3.97/4.00
- 2012–2016 **BS, Mathematics and Applied Mathematics**, *Renmin University of China, Beijing, China*.
- 2015 **Exchange Student, Mathematics and Computer Science**, *University of Helsinki, Helsinki, Finland*.

## Research Interests

My research interest is machine learning, with a focus on developing probabilistic methods that scale to massive datasets and complex models. Recently, I'm working on scalable inference with theoretical guarantees and Bayesian deep learning.

## Publications

- [1] **Asymptotically Optimal Exact Minibatch Metropolis-Hastings**.  
NeurIPS, 2020, **Spotlight, acceptance rate 2.96%**  
*Ruqi Zhang, A. Feder Cooper, Christopher De Sa*
- [2] **AMAGOLD: Amortized Metropolis Adjustment for Efficient Stochastic Gradient MCMC**.  
AISTATS, 2020  
*Ruqi Zhang, A. Feder Cooper, Christopher De Sa*
- [3] **Cyclical Stochastic Gradient MCMC for Bayesian Deep Learning**.  
ICLR, 2020, **Oral, acceptance rate 1.85%**  
*Ruqi Zhang, Chunyuan Li, Jianyi Zhang, Changyou Chen, Andrew Gordon Wilson*
- [4] **Poisson-Minibatching for Gibbs Sampling with Convergence Rate Guarantees**.  
NeurIPS, 2019, **Spotlight, acceptance rate 2.43%**  
*Ruqi Zhang, Christopher De Sa*
- [5] **Meta-Learning for Variational Inference**.  
Symposium on Advances in Approximate Bayesian Inference (AABI), 2019  
*Ruqi Zhang, Yingzhen Li, Christopher De Sa, Sam Devlin, Cheng Zhang*
- [6] **Large Scale Sparse Clustering**.  
IJCAI, 2016  
*Ruqi Zhang, Zhiwu Lu*

## Work Experience

- 6/2020– **Research Intern**, *Microsoft Research New England*.  
8/2020 Mentors: Nicolo Fusi, Rishit Sheth  
Project: Hyperparameter Schedules Optimization. One paper in progress.
- 6/2019– **Research Intern**, *Microsoft Research Cambridge, UK*.  
8/2019 Mentors: Cheng Zhang, Yingzhen Li, Sam Devlin  
Project: Meta-learning and reinforcement learning for variational inference. One paper in AABI and one paper in progress.

## Talks

- 12/2020 **Asymptotically Optimal Exact Minibatch Metropolis-Hastings.**  
Spotlight presentation at NeurIPS
- 4/2020 **Cyclical Stochastic Gradient MCMC for Bayesian Deep Learning.**  
Oral presentation at ICLR
- 12/2019 **Poisson-Minibatching for Gibbs Sampling with Convergence Rate Guarantees.**  
Spotlight presentation at NeurIPS

## Teaching

- Cornell Teaching Assistant, ILRST 5050, Statistics at Work, Fall 2018  
Teaching Assistant, STSCI 2110, Introductory Statistics, Spring 2018  
Teaching Assistant, MATH 3110, Introduction to Analysis, Spring 2017  
Teaching Assistant, STSCI 3110, Probability Models and Inference for the Social Sciences, Fall 2016, Fall 2017, Fall 2020

## Service

- Reviewer NeurIPS 2018, 2019, 2020; ICML 2019, 2020; ICLR 2019, 2020, 2021; AISTATS 2020, 2021; AAAI 2020; UAI 2019; AABI 2019, 2020; ICBINB@NeurIPS 2020

## Awards

- 2020 NeurIPS Top 10% Reviewer Award  
2019 NeurIPS Travel Grant  
2013-2015 Academic Outstanding Scholarship, Renmin University of China  
2015 Exchange Students Scholarship, University of Helsinki

## Technical Skills

- Programming Languages Python, C/C++, Matlab, R  
Deep Learning Pytorch, Tensorflow

## Languages

- Chinese Native  
English Fluent