

# MINGZHANG YIN

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## EDUCATION

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**The University of Texas at Austin, Ph.D. Candidate in Statistics**

*May 2020*

· **Supervisor:** Dr. Mingyuan Zhou

Cumulative GPA: 3.99/4.00

· **Research Interest:** Approximate Bayesian inference, Causal inference, Statistical learning theory, Information theory, Bayesian deep learning.

**Fudan University, Bachelor of Science**

*June 2015*

Mathematics and Applied Mathematics

Summa Cum Laude

## PUBLICATIONS

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(\* represents equal contribution)

- **Mingzhang Yin**, YX Rachel Wang and Purnamrita Sarkar. “A Theoretical Case Study of Structured Variational Inference for Community Detection.” **International Conference on Artificial Intelligence and Statistics (AISTATS), 2020.**
- Yuguang Yue, Yunhao Tang, **Mingzhang Yin** and Mingyuan Zhou. “Discrete Action On-Policy Learning with Action-Value Critic.” **International Conference on Artificial Intelligence and Statistics (AISTATS), 2020.**
- **Mingzhang Yin**, George Tucker, Mingyuan Zhou, Sergey Levine and Chelsea Finn. “Meta-Learning without Memorization.” **International Conference on Learning Representations (ICLR), Top 5%, Spotlight, 2019.**
- **Mingzhang Yin\***, Yuguang Yue\* and Mingyuan Zhou. “ARSM: Augment-REINFORCE-Swap-Merge Estimator for Gradient Backpropagation Through Categorical Variables.” **International Conference on Machine Learning (ICML) 2019.**
- **Mingzhang Yin** and Mingyuan Zhou. “Semi-implicit Variational Inference.” **International Conference on Machine Learning (ICML), Long Talk, 2018.**
- **Mingzhang Yin** and Mingyuan Zhou. “ARM: Augment-REINFORCE-Merge Gradient for Stochastic Binary Networks.” **International Conference on Learning Representations (ICLR), Top 10%, 2018.**
- **Mingzhang Yin** and Mingyuan Zhou. “Semi-Implicit Generative Model.” **Bayesian Deep Learning Workshop, NeurIPS 2018.**
- Bowei Yan, **Mingzhang Yin** and Purnamrita Sarkar. “Convergence of Gradient EM for Multi-component Gaussian Mixture.” **Conference on Neural Information Processing Systems (NeurIPS) 2017.**

## PAPERS IN PREPARATION

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- **Mingzhang Yin**, Mingyuan Zhou. “Best Subset Selection with Continuous Reformulation: Frequentist and Bayesian Strategies.” **In Preparation, 2019.**
- **Mingzhang Yin**, Mingyuan Zhou. “Information Theoretic Semi-Implicit Inference and Learning” **Plan to submit to JMLR, 2019.**
- Siamak Zamani Dadaneh, Mingyuan Zhou, **Mingzhang Yin** and Xiaoning Qian. “Pairwise Supervised Hashing with Discrete Latent Bernoulli Variational Auto-Encoder and Self-Control Gradient Estimator.” **In Preparation, 2019.**
- Yunhao Tang, **Mingzhang Yin** and Mingyuan Zhou. “Augment-Reinforce-Merge Policy Gradient for Binary Stochastic Policy.” **arXiv, 2019.**

## PRESENTATIONS

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“Semi-implicit Variational Inference as Accurate Black-box Posterior Inference”, *International Conference on Machine Learning*, Stockholm, July, 2018.

“Efficient Discrete Optimization with Correlated Samples”, *International Conference on Machine Learning*, Long Beach, June, 2019.

“A Pitfall in the Generalization of Meta-Learning and how we fix it”, *Statistical Seminar*, University of Texas at Austin, Austin, Texas, September, 2019

## ACADEMIC SERVICE

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**Conference reviewing:** NeurIPS 2017, 2018, 2019; ICML 2019, 2020; ICLR 2018, 2019; AISTATS 2018; UAI 2019; ACML 2018; AAAI 2018;

**Journal reviewing:** IEEE TPAMI; JMLR

**Member:** American Statistical Association (ASA) 2015-2019

## TEACHING AND ADVISING EXPERIENCE

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Teaching Assistant, Introduction to Probability and Statistics Fall 2017, Fall 2019

Teaching Assistant, Bayesian Statistical Methods Spring 2016, Spring 2017

Teaching Assistant, Design and Analysis of Experiments Spring 2017

Teaching Assistant, Linear Algebra Fall 2018

Undergraduate Mentorship, Directed Reading Program, UT Math Department Fall 2018, Spring 2019

Organizing Causal Inference Reading Group, UT Statistics Department Fall 2019

## SELECTED AWARDS AND HONORS

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The Graduate Continuing Bruton Fellowship 2018, 2019

Travel Award (NeurIPS, ICML, ICLR, MetaLearn Workshop) 2017- 2019

Outstanding Student Scholarship 2011-2015

Leo Tang Hsiang-chien Scholarship April 2013

National 1<sup>st</sup> Prize in China Mathematics Competition in Modeling October 2013

1<sup>st</sup> Prize in China Mathematical Olympiad 2011

## INDUSTRIAL RESEARCH EXPERIENCE

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**Research Intern**, Google Brain, Mountain View, CA May 2019-August 2019

**Research Intern**, Quantlab Financial LLC, Houston, TX June 2017-August 2017

**Data Science Intern**, HP Lab, Austin, TX June 2016-August 2016

**Research Intern**, China Academy of Science, Computational Biology, Shanghai 2014-2015

## SKILLS

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**Language** Native in Chinese; Fluent in English

**Programming** Fluent in Python, Matlab, R, L<sup>A</sup>T<sub>E</sub>X, Tensorflow; Familiar with C, C++, Pytorch

## REFERENCES

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Department of Statistics and Data Sciences  
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