Aonan Zhang

ByteDance Inc.
Key Center Suite 1934
601 108th Ave NE
Bellevue, WA 98004

Phone: (929) 461-6023
Office: Room 1929
Email: aonan.zhang@bytedance.com

Research Interests	Bayesian Nonparametric methods, Deep Learning

Professional Experience	**Columbia University** New York, NY Research Assistant, Department of Electrical Engineering Advisor: Prof. John Paisley GPA: 4.03/4.00	08/2014 – Present
	Tsinghua University Beijing, China Research Assistant, Department of Computer Science and Technology Advisor: Prof. Jun Zhu	07/2012 – 07/2014
Industrial Experience	**ByteDance Inc.** Bellevue, WA Research Scientist	10/2019 – now
	Google Inc. New York, NY Student Research Intern, Advisor: Dr. Chong Wang, Dr. Quan Wang Project: Adaptive model selection for general sequence modelling problems	09/2018 – 12/2018
	Google China AI Center Beijing, China Research Intern, Advisor: Dr. Chong Wang Project: Fully supervised speaker diarization.	06/2018 – 08/2018
	Microsoft Research Redmond, WA Research Intern, Deep Learning Technology Center Advisor: Dr. Yelong Shen, Dr. Jianfeng Gao Project: Learning math-word problem through reinforcement learning.	05/2017 – 08/2017

Education	B.S. in Computer Science and Technology, Tsinghua University	07/2012
	M.S. in Computer Science and Technology, Tsinghua University	07/2014
	Ph.D. in Electrical Engineering, Columbia University	10/2019

Publications

1. **A. Zhang**, J. Paisley. Random Function Priors for Correlation Modeling. *International Conference on Machine Learning (ICML)*, Long Beach, CA, USA, 2019.

2. **A. Zhang**, Q. Wang, Z. Zhu, J. Paisley, and C. Wang. Fully Supervised Speaker Diarization, *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Brighton, UK, 2019.

3. **A. Zhang** and J. Paisley. Deep Bayesian Non-parametric Tracking, *International Conference on Machine Learning (ICML)*, Stockholm, Sweden, 2018.

4. S. Gultekin, **A. Zhang** and J. Paisley. Asymptotic Simulated Annealing for Variational Inference, *IEEE Global Communications Conference (GLOBECOM)*, Abu Dhabi, United Arab Emirates, 2018.

5. **A. Zhang** and J. Paisley. Markov Latent Feature Models, *International Conference on Machine Learning (ICML)*, New York, NY, 2016.

6. **A. Zhang** and J. Paisley. Stochastic Variational Inference for HDP-HMM, *International Conference on Artificial Intelligence and Statistics (AISTATS)*, Cadiz, Spain, 2016.

7. **A. Zhang** and J. Paisley. Markov Mixed Membership Models, *International Conference on Machine Learning (ICML)*, Lille, France, 2015.

8. **A. Zhang**, J. Zhu, and B. Zhang. Max-margin Infinite Hidden Markov Models, *International Conference on Machine Learning (ICML)*, Beijing, China, 2014.

9. F. Xia, N. Chen, J. Zhu, **A. Zhang**, X. Jin. Max-margin Latent Feature Relational Models for Entity-Attribute Networks, *International Joint Conference on Neural Networks (IJCNN)*, Beijing, China, 2014.

10. **A. Zhang**, J. Zhu, and B. Zhang. Sparse Relational Topic Models for Document Networks, *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD)*, Prague, Czech Republic, 2013.

11. **A. Zhang**, J. Zhu, and B. Zhang. Sparse Online Topic Models, *International World Wide Web Conference (WWW)*, Rio de Janeiro, Brazil, 2013.

Professional Service

Conference Reviewer
Neural Information Processing Systems (NIPS) 2015, 2016, 2018, 2019
International Conference on Machine Learning (ICML) 2015, 2017, 2018, 2019
International Conference on Artificial Intelligence and Statistics (AISTATS) 2017, 2018, 2019, 2020
International Conference on Learning Representations (ICLR) 2019, 2020
Conference on Uncertainty in Artificial Intelligence (UAI) 2018, 2019
International Joint Conference on Artificial Intelligence (IJCAI) 2015, 2016

Conference Local Team
International Conference on Machine Learning (ICML) 2014

Journal Reviewer
Journal of Machine Learning Research (JMLR)
Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
Transactions on Signal Processing (TSP)

Teaching Assistant Experience at Columbia
EECS: Bayesian models for machine learning, Fall 2015, Fall 2016, Fall 2017, Fall 2018
COMS: Machine Learning for Data Science, Spring 2015
ELEN: Big Data Analytics, Fall 2014; Machine Learning, Spring 2016, Spring 2018

Selected Courses at Columbia
Foundations of graphical models (Prof. David Blei, STAT, A+)
Advanced probabilistic machine learning (Prof. John Paisley, ELEN, A)
Truth in data (Prof. David Blei, STAT, A)
Advanced machine learning (Prof. Daniel Hsu, COMS, A)
Probability Theory II (Prof. Peter Orbanz, STAT, A)
Sparse Representation & High-Dimensional Geometry (Prof. John Wright, ELEN, A)

Programming Languages
Python, C/C++, Matlab