Zhize Li (李志泽)

IIIS, Tsinghua University

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EDUCATION

Sep, 2014 - Now Ph.D. in Computer Science	Institute for Interdisciplinary Information Sciences (**IIIS**) **Tsinghua University** Advisor: **Prof. Jian Li**
Jan - Jun & Jul - Sep, 2018 Visiting Scholar	Department of Computer Science **Duke University** Host: **Prof. Rong Ge**
Jun - Jul, 2018 Visiting Scholar	Industrial and Systems Engineering (ISyE) **Georgia Institute of Technology** Host: **Prof. Guanghui (George) Lan**
Aug, 2010 - Jul, 2014 B.E. in Computer Science	Department of Computer Science **Xidian University** GPA Ranking: 2/419 Thesis: "Design of Optimal Algorithm for Multi-Armed Bandits"

RESEARCH INTERESTS

I am interested in optimization, theoretical computer science and machine learning.

- Algorithms for Convex/Nonconvex/Distributed Optimization and Machine Learning (Major)
- Algorithm Design and Data Structures
- Game Theory and Mechanism Design

EXPERIENCE/SERVICES

- (Sub-)Reviewer: ICML 2019, STOC 2019, JMLR 2018, COLT 2018, ICML 2017, AAAI 2017, ICALP 2016, TPDS 2016, TPAMI 2015, TON 2015.

- Sep, 2014 - Now   Research Assistant (**RA**)
Tsinghua-MIT-CUHK Research Center for Theoretical Computer Science

- Feb, 2017 - Jun, 2017   Teaching Assistant (**TA**)
Advanced Theoretical Computer Science for graduate students

- Jul, 2016 - Aug, 2016   The 2016 National Combinatorial Optimization Summer School
Courses: Computational Complexity, Approximation Algorithms, Randomized Algorithms
Outstanding Student (top 10/110)

- Sep, 2015 - Dec, 2015   Teaching Assistant (**TA**)
Algorithm Design for undergraduate students (Yao Class)

- **Algorithm Engineer Intern:** Alibaba (Jul - Aug, 2013), NetEase (Jun - Aug, 2017)

PUBLICATIONS

1. Rong Ge, Rohith Kuditipudi, Zhize Li, Xiang Wang (**alphabetical order**). **Learning Two-layer Neural Networks with Symmetric Inputs**. In *7th International Conference on Learning Representations* (**ICLR 2019**).

2. *Zhize Li*, Jian Li. **A Simple Proximal Stochastic Gradient Method for Nonsmooth Nonconvex Optimization**. In *32nd Conference on Neural Information Processing Systems* (**NIPS 2018**). **Spotlight**.

3. *Zhize Li*, Jian Li, Hongwei Huo. **Optimal In-Place Suffix Sorting**. In *25th International Symposium on String Processing and Information Retrieval* (**SPIRE 2018**). **Invited**.

4. *Zhize Li*, Le Zhang, Zhixuan Fang, Jian Li. **Optimal Two-Stage Mechanism for Ordinal Peer Assessment**. In *11th International Symposium on Algorithmic Game Theory* (**SAGT 2018**).

5. ***Zhize Li***, Wei Zhang, Kees Roos. **A Fast Polynomial Primal-Dual Projection Algorithm for Linear Programming**. In *23rd International Symposium on Mathematical Programming* (**ISMP 2018**). Full version in submission.

6. ***Zhize Li***, Tianyi Zhang, Jian Li. **Stochastic Gradient Hamiltonian Monte Carlo with Variance Reduction for Bayesian Inference**. Submitted to (**Machine Learning** journal). under revision.

7. ***Zhize Li***, Jian Li, Hongwei Huo. **Optimal In-Place Suffix Sorting**. Extended Abstract in *28th IEEE Data Compression Conference* (**DCC 2018**).

8. Wei Cao, Jian Li, Yufei Tao, ***Zhize Li***. **On Top-k Selection in Multi-Armed Bandits and Hidden Bipartite Graphs**. In *28th Conference on Neural Information Processing Systems* (**NIPS 2015**).

IN SUBMISSION

1. ***Zhize Li***, Jian Li. **An Anderson-Chebyshev Mixing Method for Nonlinear Optimization**. Submitted. 2018.

2. Zengyin Yang, Qian Wu, Hewu Li, ***Zhize Li***, Jianping Wu. **DC-ROS: A Decoupled-Conflict Route Oscillation Suppression Scheme for IP-based Space Network**. Submitted. 2018.

MANUSCRIPTS

1. Yu Shi, Jian Li, ***Zhize Li***. **Gradient Boosting With Piece-Wise Linear Regression Trees**. [arXiv]. 2018.

INVITED TALKS/POSTERS

1. China Theory Week 2018 (founded by Prof. Andrew Chi-Chih Yao in 2007). [slides]

2. The 16th China Symposium on Machine Learning and Applications (MLA'18). [slides]. [poster]

CONFERENCE TALKS/POSTERS

NeurIPS 2018, SPIRE 2018, SAGT 2018, ISMP 2018, DCC 2018, NIPS 2015.

SELECTED AWARDS

- National Scholarship (top 1%)
- Pacesetter of Outstanding Graduates (highest)
- The First Prize in Collegiate Advanced Mathematics Contest (highest) top 13/15000