Yuchen Zhou

YuchenZhou-stat.github.io
yczhou@wharton.upenn.edu

EDUCATION/EXPERIENCE

University of Pennsylvania   01/2022-
Postdoc, Statistics and Data Science, Wharton School, Advisor: Prof. Yuxin Chen

Princeton University   05/2021-12/2021
Postdoc, Electrical and Computer Engineering, Advisor: Prof. Yuxin Chen

University of Wisconsin-Madison   08/2016 - 05/2021
Ph.D., Statistics, Advisors: Prof. Anru Zhang and Prof. Yazhen Wang

Peking University   09/2012 - 07/2016
B.S., Mathematics and Applied Mathematics, Advisor: Prof. Liwei Wang

RESEARCH INTERESTS

High-Dimensional Statistical Inference
Tensor Data Analysis
Statistical Learning Theory
Reinforcement Learning

PUBLICATIONS

(*: alphabetical ordering authorship, †: equal contributions)

1. * Dong Xia, Anru Zhang, and **Yuchen Zhou**. Inference for Low-rank Tensors – No Need to Debias. *Annals of Statistics*, to appear.

2. **Yuchen Zhou**, Anru Zhang, Lili Zheng, and Yazhen Wang. Optimal Ultrahigh-order Tensor SVD via Tensor-Train Orthogonal Iteration with Applications in High-dimensional Statistics. *IEEE Transactions on Information Theory*, under revision.
   (*This paper received IMS Hannan Graduate Student Travel Award, 2021.*)

3. * T. Tony Cai, Anru Zhang, and **Yuchen Zhou**. Sparse Group Lasso: Optimal Sample Complexity, Convergence, and Statistical Inference. *IEEE Transactions on Information Theory*, under revision.

4. Pixu Shi[†], **Yuchen Zhou**[†], and Anru Zhang. High-dimensional Log-Error-in-Variable Regression with Applications to Microbial Compositional Data Analysis. *Biometrika*, 2021.
   (*This paper received Biometrics Early-Stage Investigator Award by the Biometrics Section of the American Statistical Association, 2019.*)

5. * Anru Zhang and **Yuchen Zhou**. On the Non-asymptotic and Sharp Lower Tail Bounds of Random Variables. *STAT*, 2020.

6. Chen Dan, Hong Wang[†], Hongyang Zhang[†], **Yuchen Zhou**[†], and Pradeep Ravikumar. Optimal Analysis of Subset-Selection Based ℓ_p Low-Rank Approximation. *Advances in Neural Information Processing Systems (NeurIPS)*, 2019.

7. Wenlong Mou, **Yuchen Zhou**, Jun Gao, and Liwei Wang. Data Training, Data-dependent Regularization, and Generalization Bounds. *International Conference on Machine Learning (ICML)*, 2018.

8. * Chen Dan, Kristoffer Arnsfelt Hansen, He Jiang, Liwei Wang, and **Yuchen Zhou**. Low Rank Approximation of Binary Matrices: Column Subset Selection and Generalizations. *43rd International Symposium on Mathematical Foundations of Computer Science (MFCS)*, 2018.

Teaching experience

TA of Stat 710 - Mathematical Statistics	Spring 2020
TA of Stat 309 - Intro to Math Statistics & Probability I	Spring 2019/Fall 2018
TA of Stat 371 - Introductory Applied Statistics For The Life Sciences	Spring 2017
TA of Stat 324 - Introductory Applied Statistics For Engineers	Fall 2019/Spring 2018/Fall 2016

Poster presentations

Neural Information Processing Systems (NeurIPS), 2019

International Conference on Machine Learning (ICML), 2020

Joint Statistical Meetings (JSM), 2019

Professional activities

Reviewer for Biometrika, IEEE Transactions on Information Theory, Journal of Machine Learning Research (JMLR), Journal of Statistical Planning and Inference, International Symposium on Information Theory (ISIT), Linear and Multilinear Algebra, STAT, IEEE Transactions on Cybernetics, Computational Optimization and Applications, NeurIPS and ICML

Honors

IMS Hannan Graduate Student Travel Award	03/2021
Student Research Grants Competition -– Travel Award, University of Wisconsin-Madison	01/2020
NeurIPS Travel Award	12/2019
ICML Travel Award	07/2018
First Prize for Outstanding Academic Performance, Peking University	09/2014
First Prize Scholarship, Peking University	09/2014
Selected to the National Training Team for the International Mathematical Olympiad	01/2012