

Chen Cheng

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Education

Stanford University, CA, USA

- **Ph.D. in Statistics**, Department of Statistics. 9/2019 – present
- GPA: 4.20/4.30.

Peking University, Beijing, China

- **B.S. in Computational Mathematics**, School of Mathematical Sciences. 9/2015 – 7/2019
- GPA: 3.90/4.00, Rank: 1/18. (with distinction)

Research Interests

High dimensional statistics, Applied mathematics, Convex and Nonconvex Optimization.

Publications

- P1 **C. Cheng**, Y. Wei, Y. Chen, “Inference for Linear Forms of Eigenvectors under Minimal Eigenvalue Separation: Asymmetry and Heteroscedasticity”, *preprint*, 2020.
- P1 Y. Chen, **C. Cheng**, J. Fan (**alphabetical order**), “Asymmetry Helps: Eigenvalue and Eigenvector Analyses of Asymmetrically Perturbed Low-Rank Matrices”, *preprint*, 2018.

Research Experiences

1. **Eigen analyses for high dimensional low-rank random matrices** 7/2018–present
Princeton University, Advisor: Prof. Yuxin Chen.
Collaborator: Prof. Jianqing Fan, Prof. Yuting Wei. (Carnegie Mellon University)
2. **Mathematical theory and novel algorithms for combinatorial problems** 10/2016–7/2019
Peking University, Advisor: Prof. Sihong Shao.
3. **MCMC sampler on manifolds/stratifications with singularities** 9/2018-1/2019
New York University, Advisor: Prof. Miranda Holmes-Cerfon.

Academic Honors & Awards

Fellowship & Scholarship

- William R. Hewlett Stanford Graduate Fellowship. 9/2019
- Yizheng Special Scholarship and Merit Student. 9/2018
- Leo-KoGuan Scholarship and Merit Student. 9/2017
- National Scholarship and Merit Student Pacesetter (Highest Honor) . 9/2016

Awards

- Excellent Graduate of Beijing. 6/2019
- Excellent Graduate of Elite Training Program of Applied Mathematics. 6/2019
- Silver Prize, S.T. Yau College Student Mathematics Contests – Group (Probability) 8/2017
- Elite Training Program of Applied Mathematics. 2017-2019
- Elite Training Program of Pure Mathematics. 2016-2019

Talks and Presentations

- T2 “Asymmetry Helps: Eigenvalue and Eigenvector Analyses Under Asymmetric Random Matrix Perturbation”, *Seminar for Modeling & Simulation*, New York University, CIMS. 25/10/2018
- T1 “Combinatorial Algorithms for MAX-CUT Problem: Review on State-of-art Algorithms and a Concurrent Evolutionary Framework”, *Seminar for Elite Ph.D Training Program of Applied Mathematics*, Peking University. 17/11/2017

Teaching Experiences

As Teaching Assistant

- STATS 141. Biostatistics. Fall 2019