JIA GU

Ph.D candidate

gujia@pku.edu.cn

EDUCATION

Nankai University	**Sept 2015 - Jun 2019**
B.Sc., Department of Mathematics, Statistics	**Ranking: 1/63**
Peking University	**Sept 2019 - Present**
Ph.D. candidate, Center for Statistical Science, Statistics	
Advisor: Prof. Songxi Chen	

RESEARCH INTERN

Ant Group	**Feb 2023 - June 2023**
Mentor: Dr. Qing Cui	

RESEARCH INTERESTS

Distributed Inference, Federated Learning, Epidemic modeling, Data Fusion

PAPERS

1. Jia Gu, Han Yan, Yaxuan Huang, Yuru Zhu, Haoxuan Sun, Yumou Qiu and Songxi Chen, "Comparing containment measures among nations by epidemiological effects of COVID-19", In National Science Review, Volume 7, Issue 12, December 2020, Pages 1847–1851. doi: 10.1093/nsr/nwaa243.

2. Han Yan, Yuru Zhu, Jia Gu, Yaxuan Huang, Haoxuan Sun, Xinyu Zhang, Yuqing Wang, Yumou Qiu and Song Xi Chen, "Better strategies for containing COVID-19 pandemic: a study of 25 countries via a vSIADR model", In Proceedings of the Royal Society A, Volume 477, Issue 2248, April 2021.

3. Jia Gu, Songxi Chen, Qian Dong, and Yumou Qiu, "The Effect of Population Migration and Wuhan Lockdown on the Control of COVID-19 Based on vSEIdRm Model (in Chinese)", In Statistical Research, Sept 2021. (CSSCI)

4. Jia Gu and Songxi Chen, "Weighted Distributed Estimation under Heterogeneity", *minor revision* at the Journal of Machine Learning Research, 2022.

5. Yuru Zhu, Jia Gu, Yumou Qiu, and Songxi Chen, "Real-World COVID-19 Vaccine Protection Rates against Infection in the Delta and Omicron Eras", In Research, Volume 6, March 2023.

6. Jia Gu and Songxi Chen, "Statistical Inference for Decentralized Federated Learning", submitted to the Annals of Statistics, 2023.

7. Yuru Zhu, Jia Gu, Yumou Qiu, and Songxi Chen, "Estimating COVID-19 Vaccine Protection Rates via Dynamic Epidemiological Models – A study of 10 countries", In Annals of Applied Statistics, 2023. (Accepted)

8. Jia Gu, Caizhi Tang, Han Yan, Qing Cui, Longfei Li, and Jun Zhou, "FAST: a Fused and Accurate Shrinkage Tree for Heterogeneous Treatment Effects Estimation", submitted to the Conference on Neural Information Processing Systems (NIPS), 2023. Ratings: 3/6/6/7/7.

INVITED TALKS

1. The first joint conference on statistics and data science in China, *Beijing*, 07/2023

TEACHING ASSISTANT

- Multivariate Analysis (undergraduate)   **Fall 2019**
- Large Sample Theory (graduate)   **Fall 2020**
- Data Analysis and Statistical Decision-making (MBA)   **Spring 2021**

SKILLS

- Programming: Proficient in R, python; Familiar with C++, MatLab
- Languages: CET-6: 600, CET-4: 656

AWARDS AND SCHOLARSHIPS

- National Scholarship, Nankai University   **2016, 2017**
- Merit Student, Nankai University   **2017**
- Minglve Innovation Scholarship, Peking University   **2021**