

Jia Gu

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Employment

Assistant Professor, Center for Data Science, Zhejiang University 2024.08 - now

Education

Center for Statistical Science <i>Ph.D. in Statistics. Advisor: Prof. Song Xi Chen</i>	Peking University Sep. 2019 - Jun. 2024
School of Mathematics <i>B.Sc. in Statistics</i>	Nankai University Sep. 2015 - Jun. 2019

Research Interests

Distributed Inference, Federated Learning, Online Inference, Epidemic Statistical modeling, Data Fusion

Invited Presentations

The first Joint Conference on Statistics and Data Science in China, Oral	2023.07
The Thirty-seventh Annual Conference on Neural Information Processing Systems, Poster	2023.12
The second Joint Conference on Statistics and Data Science in China, Oral	2024.07

Publications

- Gu, J.** and Chen, S.X. (2024). Statistical Inference for Decentralized Federated Learning. Minor revision at *The Annals of Statistics*.
- Gu, J.**, Tang, C.Z., Yan, H., Cui, Q., Li, L.F. and Zhou, J. (2023). FAST: a Fused and Accurate Shrinkage Tree for Heterogeneous Treatment Effects Estimation. *Advances in Neural Information Processing Systems (NeurIPS)*.
- Gu, J.** and Chen, S.X. (2023). Distributed Statistical Inference under Heterogeneity. *the Journal of Machine Learning Research*, 24:1 - 57 .
- Zhu, Y.R., **Gu, J.**, Qiu, Y.M. and Chen, S.X. (2023). Estimating COVID-19 Vaccine Protection Rates via Dynamic Epidemiological Models – A study of 10 countries. *The Annals of Applied Statistics*, 17(4): 3324-3348.
- Zhu, Y.R., **Gu, J.**, Qiu, Y.M. and Chen, S.X. (2023). Real-World COVID-19 Vaccine Protection Rates against Infection in the Delta and Omicron Eras. *Research*, 2023:6:0099. doi:10.34133/research.0099.
- Gu, J.**, Chen, S.X., Dong, Q. and Qiu, Y.M. (2021). The Effect of Population Migration and Wuhan Lockdown on the Control of COVID-19 Based on vSEIRm Model (in Chinese). *Statistical Research*, 38:114-127.
- Yan, H., Zhu, Y., **Gu, J.**, Huang, Y., Sun, H.X., Zhang, X.Y., Wang, Y.Q., Qiu, Y.M. and Chen, S.X. (2021). Better Strategies for Containing COVID-19 Pandemic—A Study of 25 Countries via a vSIADR Model. *Proceedings of the Royal Society A*, 477(2248): 20200440.
- Gu, J.**, Yan, H., Huang Y.X., Zhu, Y.R., Sun H.X., Qiu, Y.M. and Chen, S.X. (2020). Comparing containment measures among nations by epidemiological effects of COVID-19. *National Science Review*, 7: 1847–1851. doi: 10.1093/nsr/nwaa243.
- Sun, H.X., Qiu, Y.M., Yan, H., Huang, Y.X., Zhu, Y.R., **Gu, J.** and Chen, S.X. (2020). Tracking reproductivity of COVID-19 epidemic in China with varying coefficient SIR model (with discussion). *Journal of Data Science*, 18(3): 455-472.

ACADEMIC SERVICE

- Journal of Nonparametric Statistics, reviewer
- Journal of Multivariate Analysis, reviewer

AWARDS AND HONORS

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|---|------------|
| Lingjun Pilot Scholarship, Peking University | 2023 |
| Minglve Innovation Scholarship, Peking University | 2021 |
| Merit Student, Nankai University | 2017 |
| National Scholarship, Nankai University | 2016, 2017 |

TEACHING

Topics on Engineering Frontier Technology Fall 2024