YURU ZHU

Tel: (+86)17812745036 / Email: yuruzhu@pku.edu.cn

Peking University

No.5 Yiheyuan Road, Haidian District, Beijing 100871, P.R.China

EDUCATION

Peking University *Sept 2018 - Jul 2023*
Ph.D., Statistics, School of Mathematical Sciences
Advisor: Prof. Song Xi Chen
Sun Yat-sen University *Sept 2014 - Jul 2018*
B.Sc., Statistics, School of Mathematics

RESEARCH INTERESTS

Epidemic modeling, Environmental modeling and assessment, Causal inference

My researches focus on mathematical modeling and statistical inference to tackle the problems in epidemiology and atmospheric environment assessment. I am also fascinated by causal inference from longitudinal observational data.

PUBLICATIONS

(* indicates the co-first authorship)

1. **Zhu, Y.**, Gu, J., Qiu, Y. and Chen, S. X. (2023). Real-world COVID-19 Vaccine Protection Rates against Infection in the Delta and Omicron Eras. *Research* **6**, 0099.

2. **Zhu, Y.**, Gu, J., Qiu, Y. and Chen, S. X. (2023). Estimating COVID-19 Vaccine Protection Rates via Dynamic Epidemiological Models–A Study of Ten Countries. *The Annals of Applied Statistics* (Accepted).

3. Luo, S., **Zhu, Y.**, and Chen, S. X. (2022). Episode based air quality assessment. *Atmospheric Environment* **285**, 119242.

4. Yan, H.*, **Zhu, Y.***, Gu, J.*, Huang, Y.*, Sun, H.*, Zhang, X., Wang, Y., Qiu, Y. 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**, 20200440.

5. **Zhu, Y.**, Liang, Y. and Chen, S. X. (2021). Assessing local emission for air pollution via data experiments. *Atmospheric Environment* **252**, 118323.

6. Sun, H., Qiu, Y., Yan, H., Huang, Y., **Zhu, Y.**, Gu, J. and Chen, S. X. (2021). Tracking Reproductivity of COVID-19 Epidemic in China with Varying Coefficient SIR Model. *Journal of Data Science* **18**, 455–472.

7. Gu, J.*, Yan, H.*, Huang, Y.*, **Zhu, Y.***, Sun, H.*, Qiu, Y. and Chen, S. X. (2020). Comparing containment measures among nations by epidemiological effects of COVID-19. *National Science Review* **7**, 1847–1851.

TEACHING EXPERIENCE

Teaching Assistant at Peking University

Probability and Statistics (A) Fall 2018

Advanced Multivariate Statistical Analysis Fall 2022

SKILLS

Programming: R, MATLAB, C++
Languages: Mandarin, English (CET-6: 510)

AWARDS AND SCHOLARSHIPS

Award for Scientific Research, Peking University	*2022*
Minglue Innovation Scholarship (Grade 2), Peking University	*2022*
Merit Student, Peking University	*2021*
Johnson & Johnson Scholarship (Grade 2), Peking University	*2021*
Outstanding Graduates, Sun Yat-sen University	*2018*
Honorable Mention, the Interdisciplinary Contest in Modeling (ICM)	*2017*
National Encouragement Scholarship, Sun Yat-sen University	*2015 – 2017*
Outstanding Student Scholarship, Sun Yat-sen University	*2014 – 2017*
Second Prize, the 7th Mathematics Competition of Chinese College Students (the mathematics major group)	*2015*