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Yao Zheng

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EDUCATION

Ph.D. in Statistics, University of Hong Kong, *2017*.

B.Sc. (First-class honours) in Actuarial Science, University of Hong Kong, *2013*.

APPOINTMENTS

Assistant Professor, Department of Statistics, University of Connecticut, *2019–*.

Post-doc Researcher and Visiting Assistant Professor, Department of Statistics and School of Industrial Engineering, Purdue University, *2017–2019*.

PUBLICATIONS AND MANUSCRIPTS

(Co-first author*; Corresponding author†)

[1] **Zheng, Y.** (2022). An interpretable and efficient infinite-order vector autoregressive model for high-dimensional time series. Submitted.

[2] Huang, F., **Zheng, Y.***,†, Lu, K. and Li, G. (2022). SARMA: A computationally scalable high dimensional time series model. Submitted.

[3] Zhu, Q., Tan, S., **Zheng, Y.** and Li, G. (2022). Quantile autoregressive conditional heteroscedasticity. Under revision.

[4] Wang, D., **Zheng, Y.**† and Li, G. (2022). High-dimensional low-rank tensor autoregressive time series modeling. Under revision.

[5] **Zheng, Y.**, Wu, J. and Li, G. (2022) Least absolute deviations estimation for nonstationary vector autoregressive time series models with pure unit roots. *Statistics and Its Interface*, to appear.

[6] Wang, D., **Zheng, Y.**, Lian, H. and Li, G. (2022). High-dimensional vector autoregressive time series modeling via tensor decomposition. *Journal of the American Statistical Association*, **117**, 1338–1356.

[7] **Zheng, Y.** and Cheng, G. (2021). Finite time analysis of vector autoregressive models under linear restrictions. *Biometrika*, **108**, 469–489.

[8] **Zheng, Y.**, Zhu, Q., Li, G. and Xiao, Z. (2018). Hybrid quantile regression estimation for time series models with conditional heteroscedasticity. *Journal of the Royal Statistical Society: Series B*, **80**, 975–993.

[9] Zhu, Q., **Zheng, Y.**[*,†] and Li, G. (2018). Linear double autoregression. *Journal of Econometrics*, **207**, 162–174.

[10] **Zheng, Y.**, Li, W.K. and Li, G. (2018). A robust goodness-of-fit test for generalized autoregressive conditional heteroscedastic models. *Biometrika*, **105**, 73–89.

[11] **Zheng, Y.**, Li, Y., Li, W.K. and Li, G. (2016). Diagnostic checking for Weibull autoregressive conditional duration models. In: Li, W.K., Stanford, D.A., Yu, H. (editors): *Advances in Time Series Methods and Applications: the A. Ian McLeod Festschrift*. Springer-Verlag, New York.

[12] **Zheng, Y.**, Li, Y. and Li, G. (2016). On Fréchet autoregressive conditional duration models, *Journal of Statistical Planning and Inference*, **175**, 51–66.

HONORS AND AWARDS

– Elected Member of the International Statistical Institute (ISI), *Since 2022.*

– Institute of Mathematical Statistics (IMS) New Researcher Travel Award, *2022.*

– Excellence in Teaching Recognition, University of Connecticut, *Fall 2019.*

– University of Hong Kong:

- Best Teaching Assistant Award, *Fall 2013, Fall 2014, Fall 2016 & Spring 2017.*
- University Postgraduate Scholarship, *2013–2017.*
- Undergraduate Research Fellowship & Excellent Poster Presentation Award, *2012.*
- Statistics & Actuarial Science Scholarship, *2011.*
- C.V. Starr Scholarship for Exchange Study, *2010.*
- Summer Research Fellowship & Best Poster Presentation Award, *2010.*

PRESENTATIONS

Invited Conference Talks

1. The 22nd IMS Meeting of New Researchers in Statistics and Probability, George Mason University, *August 2022.*
2. The 5th International Conference on Econometrics & Statistics (EcoSta2022), Ryukoku University, Kyoto, Japan, *June 2022* (online).
3. The 35th New England Statistics Symposium (NESS2022), University of Connecticut, *May 2022.*
4. The 14th International Conference of the European Research Consortium for Informatics and Mathematics Working Group (ERCIM WG) on Computational and Methodological Statistics (CMStatistics 2021), King's College London, *Dec 2021* (online).
5. The 34th New England Statistics Symposium (NESS2021), University of Rhode Island, *Oct 2021* (online).

6. ISBISKOCHI2020: International Virtual Conference on Advanced Statistical Techniques in Business and Industry, Cochin University of Science & Technology, India, *Dec 2020* (online).
7. The 1st International Conference on Econometrics & Statistics (EcoSta2017), Hong Kong University of Science and Technology, Hong Kong, *June 2017*.
8. The 6th International IMS-FIPS (Finance, Insurance, Probability and Statistics) Workshop, University of Alberta, Canada, *July 2016*.

Invited Departmental Seminars

9. SUNY Binghamton University, Department of Mathematics and Statistics, *May 2022* (online).
10. Shanghai University of Finance and Economics, School of Statistics and Management, *Dec 2021* (online).
11. University of Maryland, Department of Mathematics, *Sep 2020* (online).
12. University of Missouri, Department of Statistics, *Sep 2020* (online).
13. University of Connecticut, Department of Economics, *Sep 2020* (online).
14. Boston College, Department of Economics, *Dec 2019*.
15. Indiana University-Purdue University Indianapolis, Department of Mathematics, *Oct 2018*.
16. University of Alberta, Department of Mathematical & Statistical Sciences, *Feb 2017*.

PROFESSIONAL ACTIVITIES AND SERVICES

Professional Memberships and Service

- Elected member, International Statistical Institute
- Secretary/Treasurer, Business and Economic Statistics Section, American Statistical Association, elected for 2023-2024
- Chair, The 2022 New England Statistical Society (NESS) Student Poster Awards Committee
- Member, The 2021 NESS Student Paper Awards Committee & Student Poster Awards Committee
- Member, American Statistical Association
- Member, Institute of Mathematical Statistics
- Member, New England Statistical Society
- Member, Education committee of New England Statistical Society

Referee Service

- *Annals of Statistics* (x3)
- *Canadian Journal of Statistics*
- *Communications in Statistics-Simulation and Computation* (x2)
- *Computational Statistics* (x2)
- *Contemporary Clinical Trials*
- *Economics Letters*
- *JMIR Public Health and Surveillance*

– *Journal of Business & Economic Statistics*
– *Journal of Data Science*
– *Journal of Econometrics* (x2)
– *Journal of Multivariate Analysis*
– *Journal of Statistical Computation and Simulation*
– *Journal of the American Statistical Association* (x3)
– *Journal of the Korean Statistical Society*
– *Journal of Time Series Analysis* (x2)
– *Open Health*
– *Quantitative Finance*
– *Sankhya*
– *Statistica Sinica* (x5)
– *Statistical Analysis and Data Mining* (x2)
– *Statistics and Its Interface*

Grant Proposal Reviewer

– Reviewer for the National Science Foundation (NSF)

Conference Service

– Organizer, invited session on "Modern Statistical Learning Methods for Dynamic Models." 2022 Joint Statistical Meetings, Business and Economic Statistics Section.
– Organizer, invited session on "New Advances in High-dimensional Time Series Analysis." The International Chinese Statistical Association (ICSA) Applied Statistics Symposium, *Sep 2021.*
– Organizer, invited session on "New Advances in Time Series Analysis." The 63rd International Statistical Institute (ISI) World Statistics Congress 2021, *July 2021.*
– Organizing committee. The Pfizer/ASA/UConn Distinguished Statistician Series, *Since 2019.*
– Organizer, invited session on "High Dimensional Dependent Data Analysis." The 33rd New England Statistics Symposium, University of Connecticut, *May 2019.*

Department Service

– Member, Committee on Colloquium, *2019–*.
– Member, Committee on Alumni and Friends Receptions at JSM or other major conferences, *2019–*.
– Member, Committee on Makuch Distinguished Lecture Series, *2019–*.
– Member, Committee on Library/Tech Reports, *2019–*.

TEACHING

University of Connecticut:

– STAT 3675Q Statistical Computing (4 cr., undergraduate level; *Spring 2022*).
– STAT 4825/5825 Applied Time Series (3 cr., undergraduate and graduate levels; *Fall 2021 & 2022*).
– STAT/BIST 5515 Design of Experiments (3 cr., graduate level; *Fall 2019–2022*).

– STAT/BIST 5815 Longitudinal Data Analysis (3 cr., graduate level; *Spring 2020 & 2021*).

Purdue University:

– STAT 511 Statistical Methods (3 cr., undergraduate level; *Spring & Summer 2019*).