WU Zhengxiao

School of Economics

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Education

PhD, University of Wisconsin - Madison, United States of America, 2007

Master of Science, Ohio State University, United States of America, 2003

Bachelor of Science, Nankai University, China, 2000

Academic Appointments

Senior Lecturer of Statistics, School of Economics, SMU, Jul 2015 - Present

Assistant Professor, Department of Statistics & Applied Probability, National University of Singapore, Singapore, Aug 2007 - Dec 2014

RESEARCH

Research Interests

Econometrics, empirical analysis and applied statistics; Statistical computing, hidden Markov chains, statistical filtering theory; Bayesian statistics, probability theory; Stochastic processes with applications in engineering, biology and finance.

Publications

Journal Articles [Refereed]

Quasi-hidden Markov model and its applications in change-point problems, by WU, Zhengxiao. (2016). *Journal of Statistical Computation and Simulation, 86* (12), 2273-2290. http://doi.org/10.1080/00949655.2015.1035270 (Published)

On the effect and remedies of shrinkage on classification probability estimation, by ZHANG, Chong; LIU, Yufeng; WU, Zhengxiao. (2013). *American Statistician, 67* (3), 134-142. http://doi.org/10.1080/00031305.2013.817356 (Published)

Collusion set detection using a quasi hidden Markov model, by WU, Zhengxiao; WU, Xiaoyu. (2013). *Statistics and Its Interface, 6* (1), 53-64. https://doi.org/10.4310/SII.2013.v6.n1.a6 (Published)

On the intraday periodicity duration adjustment of high-frequency data, by WU, Zhengxiao. (2012). *Journal of Empirical Finance, 19* (2), 282-291. http://doi.org/10.1016/j.jempfin.2011.12.004 (Published)

Quasihidden Markov model and its applications in cluster analysis of earthquake catalogs, by WU, Zhengxiao. (2011). *Journal of Geophysical Research,* 116 (B12), http://doi.org/10.1029/2011JB008447 (Published)

Optimal zone for bandwidth selection in semiparametric models, by LI, Jialiang; ZHANG, Wenyang; WU, Zhengxiao. (2011). *Journal of Nonparametric Statistics,* 23 (3), 701-717. http://doi.org/10.1080/10485252.2010.533768 (Published)

A note on the monotonicity of the ES-algorithm, by WU, Zhengxiao. (2011). *Journal of Statistical Computation and Simulation,* 82 (5), 759-761. http://doi.org/10.1080/00949655.2011.553195 (Published)

A hidden Markov model for earthquake declustering, by WU, Zhengxiao. (2010). *Journal of Geophysical Research,* 115 (B3), http://doi.org/10.1029/2008JB005997 (Published)

A cluster identification framework illustrated by a filtering model for earthquake occurrences, by WU, Zhengxiao. (2009). *Bernoulli,* 15 (2), http://doi.org/10.3150/08-BEJ159 (Published)

Newspaper Articles

Universal minimum wage is not suitable for Singapore, by WU, Zhengxiao. (2020, September 21). *Lianhe Zaobao* ,1-1. (Published)

Redundancy insurance is not unemployment insurance, by WU, Zhengxiao. (2020, July 27). *Lianhe Zaobao* ,1-1. (Published)

Two suggestions to WP MP Jamus Lim, by WU, Zhengxiao. (2020, July 17). *Lianhe Zaobao* ,1-1. (Published)

An interview question that brought about some thoughts, by WU, Zhengxiao. (2019, September 13). *Lianhe Zaobao* ,20-20. (Published)

TEACHING

Courses Taught

Singapore Management University

Undergraduate Programmes :

    Introductory Statistics

    Probability Theory and Applications

    Survey Methods

Postgraduate Professional Programmes :

    Data Sampling

OTHER ACADEMIC AND PROFESSIONAL ACTIVITIES

Presentation and Talks

Presentations

Quasi Hidden Markov Modeland its Applications in Change-point problems, (19 May 2018). *Hanzhou International Conference on Frontiers of Data Science,* Hangzhou, China.

Quasi Hidden Markov Model and its Applications in Change-point Problems, (27 Jun 2016). *4th Institute of Mathematical Statistics Asia Pacific Rim Meeting (4th IMS-APRM),* China

A cluster identification framework illustrated by a filtering model for earthquake occurrences, (13 Aug 2012). *Asia Oceania Geosciences Society (AOGS)-American Geophysical union (AGU)(Western Pacific Geophysics Meetings) Joint Assembly,* Singapore

A cluster identification framework illustrated by a filtering model for earthquake occurrences, (02 Jul 2012). *IMS-APRM 2012, The 2nd Institute of Mathematical Statistics, Aisa Pacific Rim Meeting,* Tsukuba. Japan

A cluster identification framework illustrated by a filtering model for earthquake occurrences, (08 Jul 2011). *IMS-China International Conference on Statistics and Probability 2011,* Xi An. China

Invited Seminars, Talks and Lectures

Quasi-hidden Markov model and its applications in change-point problems, 22 May 2019. Quasi-hidden Markov model and its applications in change-point problems, Gachon University, South Korea

On the intraday periodicity duration adjustment of high-frequency data, 26 May 2014. Presentation at Seminar/ Workshop, Southwestern University of Finance and Economics, China

A cluster identification framework illustrated by a filtering model for earthquake occurrences, 14 May 2013. Presentation at Seminar/ Workshop, Wuhan, China

Quasi Hidden Markov Model and its Applications in Change-point Problems, 19 Sep 2012. Presentation at Seminar/ Workshop, NUS, Singapore

On the intraday periodicity duration adjustment of high-frequency data, 11 Jun 2012. IWAP 2012-International Workshop on Applied Probability, Jerusalem, Israel

A cluster identification framework illustrated by a filtering model for earthquake occurrences, 25 Apr 2011. Presentation at Seminar/ Workshop, The University of North Carolina at Chapel Hill, United States of America

A cluster identification framework illustrated by a filtering model for earthquake occurrences, 07 Jul 2010. International Workshop of Applied Probability, Spain