Y. Samuel Wang

Contact Dept of Statistics

Information University of Washington

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RESEARCH Graphical models; Causal discovery; Mixed membership models; Variational inference;

Interests Empirical likelihood

ACADEMIC Post-doctoral Research Professional 2018 -

Positions The University of Chicago Booth School of Business

Supervisor: Mladen Kolar

EDUCATION Ph.D. in Statistics 2012 - 2018

University of Washington

 $The sis: \ Linear \ Structural \ Equation \ Models \ with \ non-Gaussian \ Errors$

Advisor: Mathias Drton

Committee members: Thomas Richardson and Emily Fox

B.A. in Applied Math; Economics 2006 - 2010

Rice University

Thesis: State Level Economic Volatility: Causes and Effects

Magna Cum Laude; Phi Beta Kappa

PUBLICATIONS Drton, M., Fox, C., Wang, Y.S. "Computation of Maximum Likelihood Estimates in Cyclic Structural Equation Models." Forthcoming Ann. Stat.

Wang, Y. S., Matsueda, R. L., and Erosheva, E. A. (2017). A variational EM method for mixed membership models with multivariate rank data: An analysis of public policy preferences. *Ann. Appl. Stat.*, 11(3):1452–1480

Wang, Y. S. and Drton, M. (2017). Empirical likelihood for linear structural equation models with dependent errors. *Stat*

Chen, Y.C., Wang, Y.S., Erosheva, E. "On the use of bootstrap with variational inference: Theory, interpretation, and a two-sample test example." Forthcoming *Ann. of App. Stat: Special issue for Stephen E. Fienberg*

WORK IN PROGRESS Wang, Y.S., Drton, M. "Causal Discovery for High Dimensional DAGs with non-Gaussian Data" https://arxiv.org/pdf/1803.11273.pdf

Bergstrom, C., Erosheva, E., Lee, C., Wang, Y.S., West, J. "Measuring Homophilly in Co-authorship Formation When Adjusting for Sub-discipline Attributes"

Wang, Y.S., Drton, M. "Causal Discovery for non-Gaussian Bow-free Acyclic Path Diagrams"

Wang, Y.S., Erosheva, E. "mixedMem: An R Package for Estimation of Mixed Membership Models"

Teaching University of Washington

Experience Lead Instructor

- STAT 311: Elements of Statistical Methods

Teaching Assistant

- STAT 220: Principles of Statistical Reasoning
- STAT 221: Statistical Concepts for Social Sciences
- STAT 311: Elements of Statistical Methods
- STAT 421: Applied Statistics and Experimental Design
- STAT 534: Statistical Computing
- STAT 566: Causal Modeling
- STAT 570: Adv Regression Methods for Indep Data
- CSSS 589: Multivariate Data Analysis for the Social Sciences

PROFESSIONAL

UW Statistics Dept Lead TA

2013, 2016

Service

Referee: AoAS, IJAR, JMLR, UAI

Industry Work

Susquehanna International Group

2013

Experience Assistant Trader Intern

- Worked on the index/ETF desk; created tools for calculating "robust" beta and bootstrapping portfolio risk

Deloitte 2010 – 2012

Strategy and Operations Consultant

- Focused on analytic strategy and supply chain risk assessments with heavy manufacturing, technology hardware, and oil and gas clients
- Houston office Business Analyst Action Committee lead

References

Mathias Drton

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Thomas Richardson

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