Zehang Richard Li

Contact Information

University of Washington
Department of Statistics
Box 354322
Seattle, WA 98195

(206) 902-7951
lizehang@uw.edu
Padelford Hall C14-G
http://www.zehangli.com

Education

University of Washington 2013 - Present
Ph.D. Candidate in Statistics, Machine Learning and Big Data PhD Track
Advisor: Tyler H. McCormick

The Chinese University of Hong Kong 2009 - 2013
B.Sc. in Risk Management Science
Minor in Mathematics

University of Washington, visiting student Autumn 2012
University of California, Berkeley, visiting student Summer 2011

Publications

In preparation

[1] **Zehang R. Li** and Tyler H McCormick. An expectation conditional maximization approach for gaussian graphical models. *In submission*, 2017.

[2] **Zehang R. Li**, Tyler H McCormick, and Samuel J Clark. Bayesian latent gaussian graphical models for mixed data with marginal prior information. *In preparation*, 2017.

[3] **Zehang R. Li**, Jessica Godwin, Yuan Hsiao, Bryan Martin, Jon Wakefield, and Samuel J. Clark. Changes in the spatial distribution of child mortality - homogeneity and inequalities: Small-area analysis of dhs surveys. *In preparation*, 2017.

[4] **Zehang R. Li**, Tyler H McCormick, and Samuel J Clark. Verbal autopsy analysis using openva. *In preparation*, 2017.

Peer reviewed

[1] Tyler H McCormick, **Zehang R. Li**, Clara Calvert, Amelia C Crampin, Kathleen Kahn, and Samuel J Clark. Probabilistic cause-of-death assignment using verbal autopsies. *Journal of the American Statistical Association*, (just-accepted):1–38, 2016.

[2] Georges Reniers, Sylvia Blom, Clara Calvert, Alexandra Martin-Onraet, Abraham J Herbst, Jeffrey W Eaton, Jacob Bor, Emma Slaymaker, **Zehang R. Li**, Samuel J Clark, et al. Trends in the burden of hiv mortality after roll-out of antiretroviral therapy in kwazulu-natal, south africa: an observational community cohort study. *The Lancet HIV*, 2016.

[3] Ngai Hang Chan, **Zehang R. Li**, and Chun Yip Yau. Forecasting online auctions via self-exciting point processes. *Journal of Forecasting*, 33(7):501–514, 2014.

Working papers

[1] Tuberculosis mortality and the male survival deficit in rural south africa: an observational community cohort study. *Sumbitted to PLOS ONE*, 2016.

[2] **Zehang R. Li**, Tyler H. McCormick, and Samuel J. Clark. InterVA4: An R package to analyze verbal autopsy data. *Center for Statistics and the Social Sciences Working Paper, No.146*, 2014.

[3] Samuel J. Clark, Tyler H. McCormick, **Zehang R. Li**, and Jon Wakefield. InSilicoVA: A method to automate cause of death assignment for verbal autopsy. *Center for Statistics and the Social Sciences Working Paper, No.133*, 2013.

Work in Progress

"Bayesian Variable and Covariance Selection with Application to Demand Estimation."
(Joint work with Matt Goldman and Matt Taddy)

"Scalable and interpretable Bayesian models for large social network evolution."
(Joint work with Tyler McCormick and Joshua Blumenstock)

Talks and Poster Presentations

Probabilistic models for verbal autopsy analysis

- Poster, UW Data Science Networking, Seattle 2016
- Poster, Joint Statistical Meetings, Chicago 2016

Software for verbal autopsy analysis

- Invited talk, D4H VA Working Group meeting, Columbus, Ohio 2017
- Invited Skype presentation, WHO VA Working Group meeting, Geneva, Switzerland 2016

Discovering structures in large social network graphs

- Contributed talk, Joint Statistical Meetings, Chicago 2016
- Contributed talk, Joint Statistical Meetings, Seattle 2015

Forecasting online auctions via self-exciting point processes

- Poster, ISI Young Statisticians' Meeting, Hong Kong 2013

Honors and Awards

Travel Award, UW Center for Statistics and the Social Sciences (CSSS) 2016

Blalock Fellowships, UW Center for Statistics and the Social Sciences (CSSS) 2013

Mathematical Contest in Modeling (MCM), *Meritorious Winner* 2012

Dragon Crowd SCHIESSE International Exchange Scholarships 2012

Faculty of Science Dean's List 2010

Scholarship for Excellent Mainland Student (four years tuition fee and living expense) 2009 - 2013

Work Experience

Research Intern, Microsoft Research, Redmond, WA, United States Jun - Sept 2016

- Develop machine learning and Bayesian graphical model procedures for learning competitions patterns among large numbers of notebook and tablet products.
- Mentors: Matt Goldman and Matt Taddy

Research Intern, Census and Statistics Department Hong Kong SAR Jun - Aug 2012

- Design and build hedonic models for CPI calculations of used vehicles.

Teaching

Instructor, STAT 394 Probability I (rating: 4.3/5) Summer 2017

TA, STAT 435 Introduction to Statistical Machine Learning (rating: 4.7/5) Spring 2017

TA, STAT 390 Statistical Methods in Engineering and Science (rating: 3.5/5) Winter 2017

Software

R packages on CRAN: InterVA4, InSilicoVA, Tariff, openVA

Professional Involvement

Moderator, Statistics in the Community (StatCom) 2016 - Present

Member, New Lecturer Search Committee, Department of Statistics, UW 2017

Department Statistical Consultant 2014

Reviewer, *Statistica Sinica, Statistical Analysis and Data Mining*

Professional Societies membership: American Statistical Association, Institute of Mathematical Statistics, International Chinese Statistical Association, International Society for Bayesian Analysis

Language and Skills

Programing: R, SAS, Stata, Matlab, Java, JavaScript, C and LaTeX.

Visualization: Tableau, D3.

Languages: Mandarin (Native), Cantonese (Basic), English(Fluent), and Spanish (Elementary)