

Jing Zhang

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EDUCATION

Case Western Reserve University, Cleveland, OH

- PhD in Epidemiology and Biostatistics

Sept 2019-Current

Fudan University, Shanghai, China

- Master of Science in Biostatistics
- Bachelor of Medicine in Clinical Medicine

June 2019

June 2016

Duke University, Durham, NC

Summer 2016

- A 6-week summer session taking two courses: *Linear Algebra and Differential Equations*, *Educational Psychology*

ACADEMICS

Simulation-based comparisons between generalized spatially varying coefficient models, in manuscript 2018-19

- Generated varying-coefficient simulation data based on logistic distribution, according to disease occurrence
- Compared the performance of generalized geographically weighted regression under different distributions
- Applied the result to tuberculosis in Shanghai, and Hand, Foot, and Mouth disease in 7 provinces in China

Effects of spatial autocorrelation and hospitals on tuberculosis treatment outcome: An implication of tuberculosis control in a highly integrated city, submitted 2017-18

- Explored risk factors for poor tuberculosis treatment outcome in Shanghai, in both individual level and spatial aspect
- Found the effects of spatial autocorrelation and designated hospital on treatment outcome and the biased estimation of other risk factors if spatial information was ignored
- Visualized the preference of patients in treatment hospitals and gave constructive suggestions to the government

A Simulation on the Effectiveness of the Robustness Index of Propensity Score Estimation, 2018

- Collaborated with Dr. Wei Pan, an associate professor at Duke University on the simulation-based study to prove the effectiveness of the robustness index in the presence of uncontrolled confounders
- Implemented the robustness index, probability values and percentage points for Pearson distributions in R
- Improve the method by augmenting the sampling space and bootstrap

Other academic projects involved

- Traveling Waves of Hand, Foot, and Mouth Disease (HFMD) in Western and Eastern China: An Epidemiological, Spatial, and Mathematical Analysis 2017-18
- Efficacy of *Jia Wei Yang He* formula as an adjunctive therapy for asthma: study protocol for a randomized, double blinded, controlled trial 2017-18
- Corneal Densitometry after Small Incision Lenticule Extraction (SMILE) and Femtosecond Laser-assisted LASIK (FS-LASIK): 5-year Prospective Study 2019

PUBLICATIONS

- Lu Z, Jiang W, **Zhang J**, et al. Drug resistance and epidemiology characteristics of multidrug-resistant tuberculosis patients in 17 provinces of China. PLoS One. 2019;14(11):1-14. doi:10.1371/journal.pone.0225361
- Hu Y, Xu L, Pan H, et al. Transmission center and driving factors of hand , foot , and mouth disease in China : A combined analysis. PLoS Negl Trop Dis. 2020:1-16. doi:10.1371/journal.pntd.0008070

EXPERIENCE

Case Western Reserve University, Teaching Assistant for Statistical Methods II, Cleveland

Spring 2020

Fudan University, Research Assistant, Shanghai

Fall 2016-June 2019

- Independently completed data analysis projects in clinical trials, cross-sectional studies, longitudinal studies
- Wrote R code for various kind of analysis and shared it on github

Fudan University, *Teaching Assistant for a variety of courses*, Shanghai Fall 2016-Fall 2018

- *Statistics: Principles, Methods and R*, instructed by Prof. Hua Liang from George Washington University
- *Introduction to Biostatistics*, responsible for using Stata to realize statistical methods, have instructed more than 500 undergraduate and graduate students to do fundamental statistical analysis using Stata

Shanghai Municipal Center for Disease Control and Prevention, *Research intern*, Shanghai Fall 2017

- Data preparation for tuberculosis surveillance data in Shanghai from 1992-2016
- Analyzed the spatial and temporal features for the prevalence of tuberculosis among different population
- Found spatial clusters for poor tuberculosis treatment outcome and analyzed the risk factors for it

Safe Kids Worldwide, *Intern*, Shanghai Fall 2016-June 2019

- Translated valuable articles to spread the ideas of keeping kids safe from injuries and child passenger safety in China

Huashan Hospital, *Clinical Intern*, Shanghai Fall 2015-Spring 2016

- Rotated among 24 different departments in 48 weeks in Huashan Hospital, one of the top 3 hospitals in China

East China Normal University, *Summer Course Participant in Frontiers Topics in Statistics*, Shanghai Summer 2018

- Topics included but not limited to Semiparametric, High-dimensional data analysis, Measurement Error Model

Fudan University, *Summer Course Participant in Advanced Statistical Methods in Public Health*, Shanghai Summer 2017

- Topics included but not limited to Bayesian Analysis, Generalized Additive Models, Multi-level Regression Models

University of Alberta (Canada), *Summer Course Participant in Frontiers of Global Health*, Shanghai Summer 2013

- Learnt with 3 Canadian professors and 15 Canadian students on global health topics and health policy in China

SKILLS and HONORS

- Language: Native in Chinese; Fluent in English
- English Proficiency: GRE 326+4.0, TOEFL 103
- Programming Skills: R, SAS, Stata
- Recipient of Outstanding Student in Fudan University (twice) 2012 & 2015
- Excellent Student Scholarship every year 2011-2019