Yi Zuo

(857)-316-7061 | yi.zuo@vanderbilt.edu

EDUCATION

Vanderbilt University, Nashville, TN, Expected 2023
PhD in Biostatistics

Boston University School of Public Health, Boston, MA, 2015-2017
Master of Public Health in Biostatistics, GPA: 3.85
Relevant Coursework: Intermediate Statistical Computing, Design and Conduct of Clinical Trials, Statistical Methods in Epidemiology, Survival Analysis, Meta-Analysis

Central University of Finance and Economics, Beijing, China, 2011-2015
Bachelor of Science in Statistics, GPA: 3.67
Relevant Coursework: Mathematical Analysis, Higher Algebra, Probability Theory, Discrete Mathematics, Function of A Real Variable, Statistical Computing, Data Mining

ADDITIONAL TRAINING

University of Washington, Washington, WA, Summer 2017
3rd Summer Institute in Statistics for Big Data: (1) Full Supervised Methods for Statistical Machine Learning and (2) Unsupervised Methods for Statistical Machine Learning

University of Michigan, Ann Arbor, Michigan, Summer 2014
Summer Program: Longitudinal Data Analysis, grade: A

MENTEE

Max Rosenthaler   October 2017-May 2018
First-year medical student at Boston University School of Medicine.
Project: Apply unsupervised machine learning to phenotype firearm injuries using National Inpatient Sample 1993-2014.

RESEARCH EXPERIENCE

Vanderbilt Center for Structural Biology, Nashville, TN   March 2019 - Current
Research Assistant
Supervisor: Drs. Jeffrey Blume and Brett Kroncke
Applied Expectation–Maximization (EM) algorithm to construct 95% credible interval for the prediction of penetrance for SCN5A missense variants among Brugada syndrome patients .

Vanderbilt Kennedy Center, Nashville, TN   September 2018-March 2019
Research Assistant at Treatment and Research Institute for Autism Spectrum Disorders (TRIAD)
Supervisor: Drs. Chris Fonnesbeck and Zachary Warren
Applied supervised machine learning and probabilistic programming to predict the Autism Spectrum Disorders (ASD) cases at Vanderbilt University Medical Center and Tennessee state-level database

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Boston University School of Medicine, Boston, MA   May 2017-May 2018
Lead Biostatistician at Center for Clinical Translational Epidemiology and Comparative Effectiveness Research (TEC)
Central University of Finance and Economics, Beijing, China   Apr. 2012-Aug. 2013
Research Assistant

INTERNSHIPS

BMW Brilliance Automotive Ltd., Beijing, China   Oct. 2014-May 2015
Marketing Analyst Intern in E-mobility

- Optimized BMW employee car lease program in Beijing headquarter
- Maintained consumer database for Customer Relationship Maintenance
- Updated driving safety data of 102 ZINORO 1E vehicles on weekly meetings

Wande Technology Ltd., Kunming, China   July 2013-Aug. 2013
Consultant Intern in E-commerce

- Implemented web scraping using Python to obtain the opinions about E-tourism from Social Networking Site named Weibo
- Contributed to publications by conducting literature review and data analysis using multinomial logistic regression

HONOR AND AWARDS

Scholarship, Summer Institutes at the University of Washington in Seattle, 2017
Covering the registration fees for two modules (Supervised methods for statistical machine learning and Unsupervised methods for statistical machine learning) and travel expenses
Honorable Mention, Consortium for Mathematics and Its Applications, 2014
Part of a team that ranked first 25% in Mathematical Contest in Modeling
Yongjin Research Award, Central University of Finance and Economics, 2013
Top 5% in Central University of Finance and Economics
Research Scholarship, Central University of Finance and Economics, 2013
Top 2% in Central University of Finance and Economics
Outstanding Student Researcher Award, Central University of Finance and Economics, 2012
Top 2% in Central University of Finance and Economics

PROFESSIONAL AFFILIATIONS

Member, American Public Health Association

SELECTED PUBLICATIONS

Full list available at https://scholar.google.com/citations?user=3djXdpYAAAAJ&hl=en

1. **Zuo Y**, Pino EC, Vyliparambil M, Kalesan B. Sex Differences in Early Cardiovascular and All-Cause Hospitalization Outcomes After Surviving Firearm Injury. American Journal of Men's Health.0(0):1557988318761989.

2. Bailey HM, **Zuo Y**, Li F, Min J, Vaddiparti K, Prosperi M, et al. (2019) Changes in patterns of mortality rates and years of life lost due to firearms in the United States, 1999 to 2016: A

joinpoint analysis. PLoS ONE 14(11): e0225223.

https://doi.org/10.1371/journal.pone.0225223

3. Pino EC, **Zuo Y**, Maciel De Olivera C, et al Cohort profile: The MULTI sTUdy Diabetes rEsearch (MULTITUDE) consortium BMJ Open 2018;8:e020640. doi: 10.1136/bmjopen-2017-020640

4. Kalesan B, **Zuo Y**, Xuan Z, et al. A multi-decade joinpoint analysis of firearm injury severity Trauma Surgery & Acute Care Open 2018;3:e000139. doi: 10.1136/tsaco-2017-000139

5. Pino, E. C., **Zuo, Y**., Borba, C. P., Henderson, D. C., & Kalesan, B. (2018). Clinical depression and anxiety among ST-elevation myocardial infarction hospitalizations: Results from Nationwide Inpatient Sample 2004-2013. *Psychiatry Research*.

6. Raman, M. R., **Zuo, Y.**, Seshadri, S., & Kalesan, B. (2018). VALIDATION OF A DEMENTIA SCREENING INDICATOR IN OLDER ADULTS IN THE NHANES EPIDEMIOLOGIC FOLLOW-UP STUDY. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 14(7), P232-P233.

7. Kalesan, B., Sampson, L., **Zuo, Y.** and Galea, S., 2018. Sex and age modify the relationship between life circumstances and use of a firearm in suicide deaths across 17 US states. *Journal of Affective Disorders*.

8. Kalesan, Bindu, Mrithyunjay A. Vyliparambil, **Yi Zuo**, Jeffrey J. Siracuse, Jeffrey A. Fagan, Charles C. Branas, and Sandro Galea. "Cross-sectional study of loss of life expectancy at different ages related to firearm deaths among black and white Americans." *BMJ evidence-based medicine* (2018): bmjebm-2018.

9. Kalesan B, Cheng TW, Farber A, **Zuo Y**, et al. Readmissions after thoracic endovascular aortic repair. *Journal of vascular surgery*. 2018. https://doi.org/10.1016/j.jvs.2017.12.035.

10. Siracuse, J., Farber, A., Cheng, T. W., **Zuo, Y.**, et al. (2018). IP259. Analysis of Vascular Injuries After Gunshot Wounds. *Journal of Vascular Surgery*, *67*(6), e155.

11. Siracuse, J. J., Cheng, T. W., Farber, A., James, T., **Zuo, Y**., Kalish, J. A., ... & Kalesan, B. (2019). Vascular repair after firearm injury is associated with increased morbidity and mortality. *Journal of vascular surgery*, 69(5), 1524-1531.

CONFERENCE PRESENTATIONS

Oral Presentation

Zuo, Y. (Nov. 6, 2017) Patterns of injury severity in firearm hospitalizations from 1993 to 2013: A repeated cross-sectional study. (Session 3277.0, Abstract Number 389707) American Public Health Association Annual Meeting & Expo 2017, Atlanta

Zuo, Y. (Sep. 27, 2014) Operation Evaluation of Child Nutrition Intervention Program in Pilot Provinces, Seminar on Child Nutrition Intervention Program, Beijing

Poster Presentation

Can Computational Surveillance of Autism Spectrum Disorder Fuel Big-Data Science? International Society for Autism Research 2019, May 2, 2019, Montreal, QC, Canada

Temporal trend of injury severity in firearm hospitalizations**,** Evans Days Poster Session. Nov. 13, 2016**,** Boston University School of Medicine, Boston, MA, 2016

Conference Paper

Zuo, Y. (Dec. 8, 2012) The Impact of Performance Evaluation on Doctor's Behaviors, International Seminar on Public Hospital in China: Reform and Evaluation, Beijing.