# **Tenglong Li**

## **Curriculum Vitae**

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#### **EDUCATION:**

Ph.D. Dec 2017. Michigan State University, Measurement and Quantitative Methods.

M.S. May 2012. Michigan State University, Statistics.

B.A. June 2010. Huazhong University of Science and Technology, Marketing.

#### **PROFESSIONAL POSITIONS:**

May 2018 – Present. Postdoctoral Fellow, Department of Biostatistics, Boston University.

August 2018 – Present. Lecturer, College of Professional Studies, Northeastern University.

#### **WORKING PAPERS:**

"The probability of a robust inference for external validity: a probabilistic generalizability index for randomized experiments".

"The probability of a robust inference for external validity and its applications in randomized experiments with additional controls".

"A generalized bootstrap approach for reliable estimation of variance and confidence interval in regression models with propensity score weighting" (with Jordan Lawson).

"Identifying the community and household transmission of tuberculosis via random graphs: findings based on a Brazilian household contact study" (with Laura F. White, Helen E. Jenkins, and C. Robert Horsburgh).

"The Integrated approach of learning tuberculosis transmission within and outside households via random directed graphs" (with Laura F. White, and Edward Jones-Lopez)

"The heterogeneity of reproduction numbers and dispersion for tuberculosis transmission in the U.S." (with Carly Rodriguez and Laura F. White)

"Addressing sample correlations brought by batch adjustments using ComBat" (with Evan Johnson and Yuqing Zhang).

### **PUBLICATIONS:**

- Li, T., & Frank, K.A. The probability of a robust inference for internal validity: A counterfactual approach for the failure of unconfoundedness. (under review).
- Li, T., & Frank, K. A. The probability of a robust inference for internal validity. *Sociological Methods & Research*. (accepted).
- Raykov, T., Marcoulides, G. A., & Li, T. (2018). On the unlikely case of an error-free principal component from a set of fallible measures. *Educational and Psychological Measurement*, 78(4), 708-712.
- Raykov, T., Marcoulides, G. A., & Li, T. (2017). On the fallibility of principal components in research. *Educational and Psychological Measurement*, 77(1), 165-178.
- Raykov, T., Marcoulides, G. A., & Li, T. (2016). Evaluation of measurement instrument criterion validity in finite mixture settings. *Educational and Psychological Measurement*, 76(6), 1026-1044.
- Li, T. (2009). Analysis of Industrial and Commercial Bank of China Customer Service Apperceive Factor. *Science & Technology Information*, 27, p168. (In Chinese).

Li, T. (2009). Variable Research on Internationalization of Celebrity Endorsements. *Science & Technology Innovation Herald*, 26, p250. (In Chinese).

#### **PRESENTATIONS:**

Tenglong Li. "Identifying the community and household transmission of tuberculosis via random directed graphs: Findings based on a Brazilian household contact study". Poster presented at EPIDEMIC 7 – International conference on infectious disease dynamics. Charleston SC. December 2019.

Tenglong Li. "The Bayesian Paradigm of the Robustness Indices of Causal Inferences". Poster presented at the American Educational Research Association 2017 Annual Meeting. San Antonio TX. May 2017.

Tenglong Li. "Multilevel Modeling of Mathematics Achievement: A Report of Evidence from Education Longitudinal Study". Poster presented at the American Educational Research Association 2015 Annual Meeting. Chicago IL. April 2015.

#### **TEACHING EXPERIENCE:**

Lectures taught in Michigan State University:

CEP 932: Quantitative Methods in Educational Research I (2015 Fall, 2016 Fall), CEP 933: Quantitative Methods in Educational Research II (2015 Spring, 2016 Spring), CEP 934: Multivariate Data Analysis I (2013 Fall and 2014 Fall), CEP 935: Advanced Multivariate Data Analysis II (2014 Fall) and CEP 938: Latent Variable and Structural Equation Modeling (2016 Spring),

Courses taught in Northeastern University:

ALY 6010: Probability Theory and Introductory Statistics (2018 Fall I), ALY 6015: Intermediate Analytics (2018 Fall II, 2019 Winter I, 2019 Winter II, 2019 Spring II, 2019 Fall II, 2020 Winter I, 2020 Winter II, 2020 Spring II, 2020 Summer), CED 6030: Mathematical Methods for Economists I (2018 Fall I, 2019 Fall I, 2020 Spring I).

#### **SOFTWARE SKILLS:**

Statistical Software: SAS, SPSS, STATA, Stan, Mplus, LISREL, HLM and WinBUGS.

Programming Skills: R, Python, C/C++, SQL, MATLAB, Fortran.

Other: Linux Shell Scripting, Latex, Parallel computing tools (OpenMP, OpenACC, MPI).

# **AWARDS:**

Apr 2017	Travel Fellowship	from College	of Education	Michigan St	ate University

- Apr 2015 Travel Fellowship from College of Education, Michigan State University.
- Dec 2014 Summer Research Fellowship from College of Education, Michigan State University.
- Mar 2012 Doctoral Admission Fellowship from College of Education, Michigan State University.
- Sep 2008 Scholarship for excellent extra-curricular activities from Huazhong University of Science and Technology.
- Jun 2008 Scholarship for excellent academic performance from Huazhong University of Science and Technology.

#### PROFESSIONAL AFFILIATIONS AND SERVICES:

American Educational Research Association

American Statistical Association

Reviewer for Journal of Educational and Behavioral Statistics, American Journal of Theoretical and Applied Statistics, Journal of Community Medicine and Public Health, Archives of Epidemiology, International Journal of Quantitative Research in Education.