

Lu(Laura) Wang | Curriculum Vitae

Assistant Professor, Mathematics Department, Western New England University

☎ (803) 553-7361 • ✉ lu.wang@wne.edu • 🌐 luwstat.github.io

Degrees

- **Ph.D., Statistics**
Dept of Statistics, University of South Carolina, Columbia, SC, United States 2014–2020
PhD Dissertation: Semiparametric Regression Analysis of Arbitrarily Censored Data and Panel Count Data
Advisor: Lianming Wang
- **Bachelor of Medicine, Clinical Laboratory Science**
West China School of Medicine, Sichuan University, Chengdu, P.R China 2008–2013

Experience

- **Assistant Professor of Statistics** Western New England University
August 2020 - Present
- **Graduate Teaching Assistant** University of South Carolina
Lab instructor: STAT201; Grader: STAT740,509,512,515, etc. 2014–2020
- **Internship** GCP Centre (Chengdu)
Project: LC-MS/MS Method for Analyzing Glimepiride in Human Plasma 2013
- **Internship** Geriatrics Medical Centre
Maintaining health records, documenting information 2013
- **Internship** West China Hospital
Department of Laboratory Medicine: laboratory tasks 2012
- **Trainee** West China Hospital
Division of Clinical Molecular Diagnostics: paternity testing 2009

Research Interests

Semi-Parametric Modeling, Bayesian Modeling and Computing, Complex Censored Data, Panel Count Data, Invertible Neural Network, Survival Analysis, Longitudinal Data, Joint Modeling, Reinforcement Learning, Convex Optimization.

Teaching Experience

- **MATH 331: Computation in Statistics** WNEU
Spring 2021
- **MATH 383: Mathematical Statistics** WNEU
Fall 2020

- **MATH 120: Introductory Statistics for the Arts & Sciences** **WNEU**
 Fall 2020 & Spring 2021
- **STAT 509: Statistics for Engineers** **UofSC**
 Fall 2018 & Summer 2019
- **STAT 201: Elementary Statistics** **UofSC**
 Springs 2018,2020 & Fall 2019

Refereed Journal Articles/Book Chapters

- L. Wang and L. Wang (2020). "EM algorithm for analyzing right-censored data under the semi-parametric proportional odds model". Accepted by Communications in Statistics –Theory and Methods.
- L. Wang, L. Wang, and X. Lin (2021+) "Bayesian inferences for panel count data and interval-censored data with nonparametric modeling of the baseline functions". A book chapter in book "Bayesian Inference and Computation in Reliability and Survival Analysis" Edited by Professors Yuhlong Lio, Ding-Geng (Din) Chen, Hon Keung Tony Ng and TzongRu Tsai.
- L. Wang and L. Wang (2021+). "Fitting Semi-parametric Proportional Odds Models to Arbitrarily Censored Data with EM Algorithm" Under revision at Statistics in Medicine.
- Lu Wang, Chunling Wang, Xiaoyan Lin and Lianming Wang. "Regression Analysis of Panel Count Data Accounting for Within-Subject Correlation with Nonparametric Frailty Distribution" (to be submitted)
- Minsuk Shin, Lu Wang, and Jun Liu. '*A novel MCMC sampling method based on invertible neural network*' (to be submitted)
- Lu Wang and Lianming Wang. "An EM algorithm for arbitrarily censored and left truncated data under the proportional odds model" (on going)
- Lu Wang and Lianming Wang. '*Regression analysis of multivariate interval-censored failure time data under the gamma frailty proportional odds model*' (on going)
- Edsel Pena and Lu Wang. '*Recurrent Event Modeling and Analysis of Mass Shootings in the United States*'

Presentations

- "Semiparametric Bayes Proportional Odds Models for arbitrarily censored failure time data", Joint Statistical Meetings, Baltimore, 2017
- "Fitting Semi-parametric Proportional Odds Models to Arbitrarily Censored Data with EM Algorithm", South Carolina Chapter of the American Statistical Association, 2018
- "Bayesian inferences for panel count data and interval-censored data with nonparametric modeling of the baseline functions", ICSA 2020 Applied Statistics Symposium.

Statistical Packages

- regPO: Regression analysis of arbitrarily censored data under the proportional odds models (available on: <https://github.com/luwstat/regPO>)

- regPOr: An expectation-maximization (EM) algorithm for analyzing right-censored survival data. (available on: <https://github.com/luwstat/regPOr>)

Technical and Personal skills

- **Programming Languages:** R, Python, TensorFlow, SAS, LaTeX.
- **Industry Software Skills:** Most MS Office products including Excel, Power Point and Word.

Main Courses

Reliability and Life Testing, Statistical Computing, Statistical Learning, Multivariate Analysis, Stochastic Processes, Applied Longitudinal Data Analysis, Advanced Statistical Inference, Large Sample Theory, etc.

References

Lianming Wang	Associate Professor	803-777-2834	wang99@mailbox.sc.edu
Edsel Peña	Professor	803-576-5813	pena@stat.sc.edu
Xiaoyan Lin	Associate Professor	803-777-3788	lin@stat.sc.edu
Amanda Murphy	Instructor	803-777-3291	murphy@stat.sc.edu