Shuangjie Zhang

Address: 606 Engineering Loop, Santa Cruz, CA 95064
Email: szhan209@ucsc.edu

EDUCATION

Ph.D. Candidate in Statistics, University of California, Santa Cruz   09/2019-present
M.S in Statistics, Duke University   08/2017-05/2019
B.S in Statistics, Southwestern University of Finance and Economics (SWUFE), China   09/2013-06/2017

Research Experience

Research Assistant under topic Bayesian high-dimensional modeling   UCSC
Advisor: Juhee Lee   06/2020-present
- Develop Bayesian models for multivariate count table
- Use sparse latent factor model to explore the correlation between counts.
- Apply the model to microbiome data

Research Assistant under topic Bayesian Density Regression with Discontinuity Duke University
Advisor: Surya Tapas Tokdar   05/2018-05/2019
- Develop Bayesian density regression model with a given threshold
- Use polynomial functions to approximate the density function in a nonparametric way
- Implement the inference by adaptive blocking MCMC and make use of Gelman–Rubin diagnostic
- Apply the model to solve real discontinuity data from business proposals

Teaching Experience

Teaching Assistant, Duke University   09/2018- 12/2018
- Course 601 Bayesian Methods and Modern Statistics for master and PhD students
- Lead lab sections for master students and PhD students

Publication

1. Shuangjie Z., Yuning S., Irene A. C., and Juhee L.(2021) **Bayesian Modeling of Interaction between Features in Sparse Multivariate Count Data with Application to Microbiome Study,** under revision of *AOAS*