

# Qingyang Liu

## Education

- 2019-2023 **PhD in Statistics**, *University of South Carolina*, GPA:4.0/4.0  
Expected graduation: May 2023  
Dissertation: Parametric and Semiparametric modal regression models  
Advisor: Dr. Xianzheng Huang
- 2015-2017 **Master of Science in Statistics**, *Temple University*, GPA:3.83/4.0

## Work Experiences

- 2019-2023 **Instructor**, *University of South Carolina*
- Teach elementary statistics (STAT 201), Fall 2019 - Summer 2022.
  - Teach elementary statistics for the biological and life sciences (STAT 205), Fall 2022 - Spring 2023.
- 2017-2019 **Statistician**, *Corteva Agriscience*
- Statistical analysis of agricultural experiments for developing new fungicides.
- 2016-2017 **Data Analyst**, *Temple University - Wellness Resource Center*
- Statistical analysis of psychological data about students' mental health and related behavior.

## Research Interests

Modal regression models, robust statistics, spatio-temporal statistics, Bayesian parametric/nonparametric models, measurement error and computational statistics.

## Honours and Awards

- Outstanding Graduate Student in Academics,  
Department of Statistics, University of South Carolina, Year 2022.
- Outstanding Graduate Assistant,  
Department of Statistics, University of South Carolina, Year 2021.
- Outstanding First-Year Graduate Student,  
Department of Statistics, University of South Carolina, Year 2020.
- Dean's Certificate of Excellence,  
Fox School of Business, Temple University, Year 2017.

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## Grant Application

University of South Carolina. Support to Promote Advancement of Research and Creativity (SPARC). "A Flexible Modal Regression Based on Gumbel Mixture Distribution". **Role: PI.** Requested amount: \$4,995.13. Submitted in October, 2021. **Result: rejected.**

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## Publications

Qingyang Liu and Xianzheng Huang. Parametric modal regression with error in covariates. *arXiv:2212.01699*, 2022.

Qingyang Liu, Xianzheng Huang, and Rai Bai. Bayesian modal regression based on mixture distributions. *arXiv:2211.10776*, 2022.

Qingyang Liu, Xianzheng Huang, and Ray Bai. Bayesian semiparametric modal regression models. *In preparation.*

Qingyang Liu, Xianzheng Huang, and Haiming Zhou. The flexible gumbel distribution: A new model for heavy-tailed data. *arXiv:2212.01832*, 2022.

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## Technical Skills

Programming Languages C++, R, PYTHON, STAN, SAS, JAGS