

# Shuangjie Zhang

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## EDUCATION

[University of California Santa Cruz](#), Santa Cruz, CA

2019-2024(expected)

**Ph.D. in Statistical Science**

Advisor: Professor Juhee Lee

[Duke University](#), Durham, NC

2017 – 2019

**Master of Statistical Science**

Advisor: Professor Surya T. Tokdar

[Southwestern University of Finance and Economics](#), Chengdu, China

2013 – 2017

**Bachelor of Science, Statistics**

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## PREPRINTS

- **Zhang, S.**, Lee, J. Covariate Dependent Factor Model for Feature Interactions in Microbiome Study (In progress)
- Zheng, H., **Zhang, S.**, Sen R., Tokdar S. [Bayesian Density Regression with Discontinuity](#) (Submitting to Journal of Business & Economic Statistics)
- **Zhang, S.**, Shen Y., Chen I. and Lee, J. (2023+) [Sparse Bayesian Group Factor Model for Feature Interactions in Multiple Count Tables Data](#) (Under revision of Journal of the American Statistical Association)

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## PUBLICATIONS

- **Zhang, S.**, Shen Y., Chen I. and Lee, J. (2023) [Bayesian Modeling of Interaction between Features in Sparse Multivariate Count Data with Application to Microbiome Study](#) (*The Annals of Applied Statistics* 17.3 (2023): 1861-1883)

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## PRESENTATIONS

- Joint Statistical Meetings, Toronto, Canada, 2023
- Objective Bayes, Santa Cruz, CA, 2022

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## SOFTWARE

- **Sp-BGFM**: R package (in preparation) for Sparse Bayesian Group Factor Model for Feature Interactions in Multiple Count Tables Data. <https://github.com/Zsj950708/SP-BGFM>
- **Zi-MLN**: R code for Bayesian Modeling of Interaction between Features in Sparse Multivariate Count Data with Application to Microbiome Study. <https://github.com/Zsj950708/ZI-MLN>

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## FELLOWSHIP & AWARD

- SFASA JSM Student Travel Award, San Francisco Bay Area Chapter of the American Statistical Association, 2023
- UCSC Dean's Travel Award, University of California Santa Cruz, 2023
- Department Summer Fellowship, University of California Santa Cruz, 2022
- UCSC Regent Fellowship, University of California Santa Cruz, 2020
- National Student Scholarship, Southwestern University of Finance and Economics, 2015

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## TEACHING EXPERIENCE

**Graduate Teaching Assistant:**

- STAT 132 Classical and Bayesian Inference – UCSC – Winter 2023

- STAT 131 Introduction to Probability Theory – UCSC – Summer 2022-02, Spring 2023
- STAT 5 Statistics – UCSC – Fall 2019, Winter 2020, Summer 2020-01, Fall 2021, Spring 2022, Summer 2022-01
- STA 601 Bayesian Methods and Modern Statistics – Duke University – Fall 2018

#### Graduate Student Researcher

- Fall 2020, Winter 2021, Spring 2021, Summer 2021, Winter 2022

#### COMPUTER SKILLS

- R, R++, Python, Latex

#### CONTRIBUTIONS TO SCIENTIFIC COMMUNITY

- Invited-reviewer for article submitted to *Computational Statistics & Data Analysis*. 2022
- Professional membership for International Society for Bayesian Analysis (ISBA) and American Statistical Association (ASA)

#### REFERENCES

- **Juhee Lee:** Professor  
Department of Statistics  
University of California Santa Cruz  
1156, High Street, Santa Cruz, CA, 95064  
[juheele@soe.ucsc.edu](mailto:juheele@soe.ucsc.edu)
- **Surya T. Tokdar:** Professor  
Department of Statistics  
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