

# Zichen Ma

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## Education

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|-----------------|---|
| 2021 (expected) | Ph.D., Statistics, University of South Carolina<br>GPA: 4.0/4.0<br>Advisor: Y.-Y. Ho, J.M. Tebbs    |
| 2015            | M.S., Applied Statistics, Rochester Institute of Technology<br>GPA: 4.0/4.0<br>Advisor: E.P. Fokoué |
| 2012            | B.A., Economics, Capital University of Economics and Business, Beijing, China                       |

## Research Interests

Bayesian statistics, multivariate data analysis, copula methods

## Publications

1. **Ma, Z.**, Hanson, T. E., and Ho, Y.-Y. (2020). Flexible bivariate correlated count data regression. *Statistics in Medicine* **39**: 3476-3490. <https://doi.org/10.1002/sim.8676>
2. **Ma, Z.** and Hanson, T. E. (2020). Bayesian nonparametric test for independence between random vectors. *Computational Statistics and Data Analysis* **149**. <https://doi.org/10.1016/j.csda.2020.106959>
3. **Ma, Z.** and Fokoué, E. P. (2014). Accent recognition for noisy audio signals. *Serdica Journal of Computing* **8**(2): 169-182.
4. **Ma, Z.** and Fokoué, E. P. (2014). A comparison of classifiers in performing accent recognition using MFCCs. *Open Journal of Statistics* **4**(4): 258-266.

## Manuscripts in Preparation

1. **Ma, Z.** and Ho, Y.-Y. (2020+). Dynamic correlation in zero-inflated exponential family with application to single cell multi-omics data.
2. Stutz, R., **Ma, Z.**, and Tebbs, J. M. (2020+). EM gradient boosting algorithms for estimation and classification of group testing data.

## Conference Presentations

1. Joint Statistical Meetings 2019, Denver, CO, 2019 (Oral presentation)
2. ENAR 2019 Spring Meeting, Philadelphia, PA, 2019 (Oral presentation)
3. SC-ASA Palmetto Symposium 2019 Spring Meeting, Columbia, SC, 2019 (Oral presentation)
4. Southern Regional Council on Statistics, Virginia Beach, VA, 2018 (Poster presentation)
5. Fourth Annual Conference of the Upstate New York Chapters of the American Statistical Association, Geneseo, NY, 2015 (Oral presentation)
6. Third Annual Conference of the Upstate New York Chapters of the American Statistical Association, Geneseo, NY, 2014 (Oral presentation)

## Honors and Awards

1. University of South Carolina Dept. of Statistics Research Award, 2020
2. University of South Carolina Dept. of Statistics Citizenship Award, 2019
3. Best student presentation, SC-ASA Palmetto Symposium 2019 Spring Meeting, 2019
4. University of South Carolina Dept. of Statistics Research Award, 2018
5. University of South Carolina SPARC Graduate Research Grant, 2017-2018
6. University of South Carolina Dept. of Statistics Outstanding First Year Graduate Student, 2016

## Teaching Experience

For the courses listed below, I served as the instructor of record.

### University of South Carolina:

Course	Semester	Class size
STAT 201 Elementary Statistics	F16, S17, F17, S18	72
STAT 205 Elem. Stat. for Biol. and Life Sciences	F18, S19, F19, S20, F20	100
MATH/STAT 511 Probability	Summer 2019	20
STAT 512 Mathematical Statistics	Summer 2020	15

## References

### Dr. Yen-Yi Ho

Assistant Professor

Department of Statistics

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### Dr. Joshua M. Tebbs

Professor

Department of Statistics

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### Dr. Timothy E. Hanson

Senior Statistical Manager

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