

RONG ZHENG

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EDUCATION

The University of Alabama (UA)

Doctor of Philosophy, GPA - 3.83

Applied Statistics

Tuscaloosa, AL

August 2017 (Expected)

PhD Dissertation topic:

Some Contributions to Univariate Nonparametric Tests and Control Charts

Advisor:

Dr. Subha Chakraborti

The University of Alabama (UA)

Master of Science, GPA - 4.00

Applied Statistics

Tuscaloosa, AL

August 2012-December 2014

The Henan University

Bachelor of Science

Mathematics and Applied Mathematics

Henan, China

September 2008-June 2012

AWARDS AND GRANTS

Awards and Honors

- Jeff Kurkjian Teaching Award in Applied Statistics at the Culverhouse College of Commerce and Business Administration, UA 2016.
- Student Travel Award from the Quality and Productivity Section of the American Statistical Association to attend the Joint Statistical Meetings, Seattle 2015.
- First prize in the Seventh Annual National SAS Analytics and Data Mining Shootout competition, out of 26 teams from 16 schools nationwide, Orlando 2013.
- Outstanding teaching assistant in Applied Statistics at the Culverhouse College of Commerce and Business Administration, UA 2014.

Grants

- Recipient of summer research funding from the ISM department at UA (\$2,500), 2015-2016.
- Recipient of graduate school research and travel funding at UA, 2013-2016.

TEACHING EXPERIENCE

Department of Information Systems, Statistics & Management Science at UA Tuscaloosa, AL

Teaching Assistant

August 2012-present

- Independent teaching of Introductory Statistical Methods course (ST260).
- Assisting with an undergraduate level statistics course (ST260) for over 200 students (using JMP as the required analytical tool in class).
- Assisting with an on-line undergraduate level statistics course (ST260) for 70 students.

- Assisting with master's level statistics courses: Statistical Methods (ST560), Design of Experiments (ST561), Statistical Process Control (ST575).

PEER-REVIEWED PAPERS

Zheng, R. and Chakraborti, S. (2016): A Phase II Distribution-free Adaptive Exponentially Weighted Moving Average Chart. Accepted by *Quality Engineering*.

Melnykov, V., Sarkar S., and **Zheng, R.**: Model-Based Clustering Under Measurement Uncertainty. In preparation for submission in Dec 2016.

Zheng, R. and Chakraborti, S.: Kruskal Wallis Test under Scrutiny. In preparation for submission.

CONFERENCE PROCEEDINGS

Zheng, R. and Chakraborti, S. (2015): A Robustness Study of the Adaptive EWMA Control Chart. *The Joint Statistical Meetings, American Statistical Association Proceedings*

Zheng, R. and Chakraborti, S. (2014): A Study of the Quantile Control Chart. *The Joint Statistical Meetings, American Statistical Association Proceedings*

CONFERENCES AND PRESENTATIONS

Oral presentations at conferences:

2015: Joint Statistical Meetings in Seattle, Washington.

Topic: A robustness study of the AEWMA control chart.

2014: Joint Statistical Meetings in Boston, Massachusetts.

Topic: A study of the quantile control chart.

2013: Analytics conference series in Orlando, Florida

Topic: Solution to a data mining shootout predictive modeling case study.

Poster presentations at conferences:

2016: Joint Statistical Meetings in Chicago, Illinois.

Topic: A robustness study of the Kruskal Wallis Test.

2015: Southern Regional Council on Statistics at Carolina Beach, North Carolina

Topic: A robustness study of the AEMWA control chart.

Departmental seminar talk:

2015: Oral presentation at the applied statistical seminar at the ISM department.

Topic: A robustness study of the AEWMA control chart.

2013: Oral presentation at the Annual Business Analytics Symposium at UA.

Topic: SAS Analytics and Data Mining Shootout.

PROJECT EXPERIENCE

Seventh Annual National SAS Analytics and Data Mining Shootout Competition

- Topic: Solution to a Data Mining Case Study
Member of the winning team (six team members) out of 26 teams from 16 schools nationwide.
- Provided with real world datasets consisting 5 million and 2 million observations respectively.
- Required to find solutions to reduce the cost of medical and pharmaceutical expenses for state of New Hampshire.

- Software, such as JMP, SAS base, SAS Enterprise miner and SAS Enterprise guide, are applied to analyze the data.
- Messy data are cleaned, explored and prepared for the model building step.
- Predictive models, such as Regression, Decision Tree, Neural network, are built to analyze and make prediction for the incidence of six diseases, for 10 counties of New Hampshire, over 10 years.

World Data Mining Cup

- Topic: Predicting returns for the sales of discounted articles and voucher redemptions
Ranked number 25 among 75 worldwide teams, and number 4 among the US teams.
- Provided with two datasets consisting 15 variables, approximate 2.33 million and 0.34 million observations respectively.
- R packages are applied to analyze the data.
- Predictive models, such as Generalised Linear Model, Random Forest, are built to make prediction for the returns.

COMPUTER SKILLS

Programming languages: R, SAS base (with certification)

Software: JMP, SAS Enterprise miner, SAS Enterprise guide, Minitab, Microsoft Office, LaTeX

PROFESSIONAL MEMBERSHIPS

Institute of Mathematical Statistics

American Statistical Association

International Institute for Analytics