# BEIDI QIANG

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#### **EDUCATION**

### University of South Carolina-Columbia

Aug 2012- Present

Ph.D in Statistics

Advisor: Dr. Edsel A. Peña

### **Denison University**

2008 - 2012

B.S. in Mathematics, magna cum laude

Second Major in Economics

# Budapest Semesters in Mathematics, Budapest, Hungary

Fall 2011

Study Abroad Program

Specialized tutorial in abstract algebra and number theory

### TEACHING EXPERIENCE

# Instructor, Elementary Statistics

Aug 2012- May 2016

Columbia, SC

Department of Statistics, University of South Carolina

Prepare lecture and lab activities for undergraduate students.
Taught regular, evening and summer sections, with class size varying from 20 to 70.

Statistics Tutor Aug 2012- May 2015

Department of Statistics, University of South Carolina

Columbia, SC

· Tutor for Elementary Statistics and Introduction to Statistical Reasoning.

# Department Fellow

2011 - 2012

Department of Mathematics and Computer Science, Denison University

Granville, OH

- · Math tutor at undergraduate Level.
- · Organizing and serving to department events and activities.

#### RESEARCH EXPERIENCE

Research Assistant, Center for Colon Cancer Research, Biometry Core May 2016- Present University of South Carolina Columbia, SC

- · Statistical consulting with CCCR researchers.
- · Develop new statistical methods for colon cancer research.

# Summer Scholar, Summer Research Program

Jun - Aug 2010

Denison University

Granville, OH

- · Topic: A Combinatorial Exploration for a Kostka Matrix Identity.
- · Guided by Dr. Sarah Rundell and funded by The Carl Arvid Anderson Family Fund.

### HONORS AND AWARDS

National Institutes of Health (NIH) COBRE Grant PI: Dr. Frank Berger. Title: Biometry Core: Center for Colon Cancer Research.	2016-Present
Teaching/Research Assistantship Department of Statistics, University of South Carolina	2012-Present
Outstanding First Year Graduate Awards  Department of Statistics, University of South Carolina	2013
Chapter President, Pi Mu Epsilon - National honorary mathematics society $\it Denison\ University,\ Granville,\ OH$	2011-2012
Chapter Treasure, Association for Women in Mathematics Denison University, Granville, OH	2010-2011
The R. Stanley and Janet O. Laing Endowed Scholarship Department of Economics, Denison University, Granville, OH	2011-2012
Forbes B. Wiley Award Department of Mathematics and Computer Science, Denison University, Granville, OH	2010-2011
Tyree/Parajon Scholarship Denison University, Granville, OH	2008-2012

### PUBLICATIONS AND PRESENTATIONS

# Improved Estimation of System Reliability with Application in Software Development Beidi Qiang and Edsel Pena

In Analytic Methods in Systems and Software Testing, Ruggeri, F., Kenett, R. and Faltin, F. W. (eds) To appear

# Shrinkage Estimation of System Reliability

SAMSI Spring 2016, Durham, NC

Games and Decision in Reliability and Risk Workshop

# Nonparametric Shrinkage Median Estimation

ENAR Spring 2016, Austin, TX

Posters: Semi-and Non-Parametric Methods

# A Combinatorial Exploration for a Kostka Matrix Identity

MathFest 2010, Pittsburgh, PA

MAA Student Paper Section

### CURRENT RESEARCH PROJECTS

# Improved Estimation of System Reliability Through Shrinkage Idea

with Edsel Pena

### **Robust Simultaneous Estimator of Location**

with Edsel Pena

# Game Theory and the Equilibrium in Multiplayer Sequential Game

with Edsel Pena

# Analysis of Calcium Imaging Data in Neural Microcircuit Selection Following Cocaine Exposure

with Edsel Pena and Pavel Ortinski

### Colorectal Cancer Screening Program

with Jan M. Eberth, Annie Thibault, Renay Caldwell, Edsel Pena, Delicia LaFrance, Heather M. Brandt, and Franklin G. Berger

# Modeling and Inference in Predictive Calibrations for Large Data Sets

with Stephen L. Morgan, Edsel Pena

# Adaptive Optical Sensing for Big Data Chemical Calibrations

with M.L. Myrick, Stephen L. Morgan, Edsel Pena