# Brian R. Gaines

brgaines@ncsu.edu http://brgaines.github.io

#### **EDUCATION**

#### North Carolina State University, Raleigh, NC

Doctor of Philosophy, Statistics

May 2017 (Expected)

August 2014

Master of Statistics, Mathematical Statistics Concentration

GPA: 3.8/4.0

Passed qualifier at Ph.D. level

· Passed Ph.D. written prelim exam

### Virginia Commonwealth University, Richmond, VA

Non-degree seeking

August 2007 - May 2011

• GPA: 4.0/4.0

Completed nine math courses

### Indiana University, Bloomington, IN

Bachelor of Arts (High Distinction), Economics & Political Science

May 2007

GPA: 3.9/4.0Phi Beta Kappa

#### ACADEMIC EXPERIENCE

#### North Carolina State University, Raleigh, NC

Teaching Assistant

Aug. 2011 - May 2014, Aug. 2015 - May 2016, Aug. 2016 - Present

- ST512 Experimental Statistics For Biological Sciences II
- ST372 Introduction to Statistical Inference and Regression
- ST311 Introduction to Statistics
- ST350 Economics & Business Statistics

Lecturer, ST311

Guest Lecturer, ST512

May 2014 - Aug. 2014, June 2015 - Aug. 2015

November 2012, March 2015

#### University of Richmond, Richmond, VA

Guest Lecturer, ECON 200 - Money & Banking

January 2011

#### WORK EXPERIENCE

#### MaxPoint Interactive, Inc., Morrisville, NC

Data Scientist Intern

May 2016 - August 2016

- Researched & implemented methods to improve the modeling of product sales data
- Improved predictive accuracy by 40% on average

### NC State University College of Veterinary Medicine, Raleigh, NC

Statistical Consultant

August 2014 – August 2015

- Employed various statistical methods to answer research questions
- Experimental design, power analyses, and applied statistical modeling

### Federal Reserve Bank of Richmond, Richmond, VA

Research Associate (Research)

July 2010 - August 2011

- Supplied research assistance to staff economists
- Aided in preparation of memos for policy meetings

Research Associate (National Economic Conditions)

July 2007 - July 2010

- Briefed economists on recent macroeconomic data
- Provided research support for President Jeffrey Lacker

### U.S. Congressman Mike Pence, Washington, D.C.

Intern

June 2006 - July 2006

- Attended hearings and briefed congressional staff members
- Addressed constituent concerns on various national policy issues

#### PROFESSIONAL ACTIVITIES & SERVICE

### NC State University Statistics Department, Raleigh, NC

Department Head Search Committee Visit Day Organizer

May 2016 - Present January 2015 - March 2015

Stat Buddy Mentor

June 2012 - May 2013, June 2014 - May 2014

### NCSU Statistical Learning Group (SLG), Raleigh, NC

Organizer

July 2014 - May 2015

#### Department Graduate Student Association (GSA), Raleigh, NC

President

May 2013 – May 2014

Member, Beach Trip Committee

June 2013 - September 2013

### Statistics in the Community (STATCOM), Raleigh, NC

Member, Executive Committee

November 2012 – November 2013

### **PUBLICATIONS**

Muller, C., **Gaines, B**., et al. (2016). "Evaluation of Clinical Metrololgy Instrument in Dogs with Osteoarthritis." *Journal of Veterinary Internal Medicine*, 30(3), 836-846.

Jarque, A., and **Gaines, B**. (2013). "Regulation and the Composition of CEO Pay." *Federal Reserve Bank of Richmond Economic Quarterly*, 98(4), 309-348.

#### **AWARDS**

Francis G. Giesbrecht Award for Statistical Consulting	April 2015
Gertrude M. Cox Achievement Award (best prelim exam)	April 2014
Department Outstanding Teaching Assistant	April 2014
University GSA Outstanding Teaching Assistant	March 2014
Elected to Mu Sigma Rho (statistics honor society)	March 2013
STEM Supplemental Fellowship	August 2011 - May 2012

## RESEARCH INTERESTS

Machine learning, big and high-dimensional data, computational statistics, Bayesian methods

# COMPUTING EXPERIENCE

R, MATLAB, SAS, LaTeX, Linux, Git, Julia, Python, SQL, Microsoft Office, Stata