Brian R. Gaines

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http://brgaines.github.io

EDUCATION

North Carolina State University, Raleigh, NC
Doctor of Philosophy, Statistics   August 2017 (Expected)
Master of Statistics, Mathematical Statistics Concentration   August 2014
- GPA: 3.8/4.0
- Passed qualifier at Ph.D. level
- Passed Ph.D. written & oral prelim exams

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: 3.9/4.0
- Phi 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

Guest Lecturer, ST790 (Advanced Computing)   March 2016
Lecturer, ST311   May 2014 – Aug. 2014, June 2015 – Aug. 2015
Guest Lecturer, ST512   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 model client 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

PROFESSIONAL ACTIVITIES & SERVICE

NC State University Statistics Department, Raleigh, NC
Department Head Search Committee   May 2016 - Present
Visit Day Organizer   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

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

COMPUTING EXPERIENCE

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

RESEARCH INTERESTS

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

PUBLICATIONS

Gaines, B., and Zhou, H. (2017). "Algorithms for Fitting the Constrained Lasso," submitted.

Balko, J., Wilson, S., Lewbart, G., **Gaines, B**., and Posner, L. (2017). "Propofol as an Immersion Anesthetic and in a Minimum Anesthetic Concentration (MAC) Reduction Model In Goldfish (Carassius Auratus)," J*ournal of Zoo and Wildlife Medicine*, forthcoming.

Jarrett, M., Bailey, K., Messenger, K., Prange, T., **Gaines, B**., and Posner, L. (2017). "Recovery of Horses from Heneral Anesthesia Following Induction with Either Propofol or Midazolam Followed by Ketamine," *Journal of the American Veterinary Medical Association*, forthcoming.

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

Jarque, A., and **Gaines, B**. (2012). "Regulation and the Composition of CEO Pay." *Federal Reserve Bank of Richmond Economic Quarterly*, 98(4), 309-348.