

Shawn M. Santo

CONTACT INFORMATION

Duke University
Department of Statistical Science
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EDUCATION

Michigan State University, East Lansing, Michigan

Ph.D., Statistics, December 2018

- Dissertation topic: “Statistical inference with high-dimensional dependent data”
- Adviser: Ping-Shou Zhong

Oklahoma State University, Stillwater, Oklahoma

M.S., Quantitative Financial Economics, May 2013

- Area of concentration: Risk Management

Kutztown University of Pennsylvania, Kutztown, Pennsylvania

B.S., Mathematics, May 2011

- Area of concentration: Applied Mathematics

B.S., Business Administration, May 2011

- Area of concentration: Finance
- Minor area of concentration: Economics

HONORS AND AWARDS

William L. Harkness Faculty Award, 2017: Outstanding Course Development, Michigan State University

William L. Harkness Award, 2015: Outstanding Graduate Student Teaching, Michigan State University

16th place Rotman International Trading Competition, 2012: University of Toronto

Outstanding Presentation Award, 2011: Quantitative Financial Economics Alumni Weekend, Oklahoma State University

Top Academic Achievement in Finance and Economics Award, 2011: Kutztown University of Pennsylvania

Outstanding Mathematics Student Award, 2011: Kutztown University of Pennsylvania

Full Academic Scholarship, 2006-2011: Kutztown University of Pennsylvania

Pennsylvania State Athletic Conference Scholar Athlete, 2006-2009: Kutztown University of Pennsylvania

Athletic Swimming Scholarship, 2006-2009: Kutztown University of Pennsylvania

ACADEMIC EXPERIENCE	Duke University , Durham, North Carolina <i>Department of Statistical Science, Assistant Professor of the Practice</i> July 2019 - present
	Michigan State University , East Lansing, Michigan <i>Department of Statistics and Probability, Fixed Term Instructor</i> May 2017 - June 2019 <i>Department of Statistics and Probability, Teaching Assistant</i> Aug 2013 - May 2018
TEACHING	Duke University , Durham, North Carolina <i>Statistical Programming</i> , Fall 2019
	Michigan State University , East Lansing, Michigan <i>Computational Methods for Data Science</i> , Fall 2017, 2018 <i>Introduction to Data Science</i> , Spring 2019 <i>Probability and Statistics for Business</i> , Summer 2015 <i>Probability and Statistics for Business - Online</i> , Summer 2017, 2018, 2019 <i>Statistical Methods</i> , Summer 2014 <i>Statistics for Scientists</i> , Spring 2018
COURSE DEVELOPMENT	Michigan State University , East Lansing, Michigan <i>Introduction to Data Science</i> Aug 2018 - May 2019 Introduces students to the R programming environment. Students will learn to manipulate data objects, produce advanced graphics, read and tidy data, analyze data using introductory statistical methods, and generate reproducible statistical reports using R markdown.
PUBLICATIONS	Zhong, P-S., Li, R., & Santo, S. (2019). Homogeneity tests of covariance matrices with high-dimensional longitudinal data. <i>Biometrika</i> .
PAPERS IN PREPARATION	Santo, S. & Zhong, P-S. Change point detection and identification in high-dimensional functional data. <i>Manuscript</i> .
	Santo, S., Zhong, P-S., & Steibel, J. A hidden Markov approach for QTL mapping using allele-specific expression SNPs. <i>Manuscript</i> .
R PACKAGE DEVELOPMENT	Zhong, P-S., Li, R., & Santo, S. (2019). Maintainer: Shawn Santo. HDCovMatTest: Homogeneity tests of covariance matrices with high-dimensional longitudinal data. R package version 1.0.0.
CONFERENCE PRESENTATIONS	Homogeneity tests of covariance matrices with high-dimensional longitudinal data. International Chinese Statistical Association Applied Statistics Symposium, New Brunswick, New Jersey, 2018.
CONFERENCE ORGANIZATION	Chair: New developments in large-scale data analysis. International Chinese Statistical Association Applied Statistics Symposium, New Brunswick, New Jersey, 2018.

DEPARTMENT
SERVICE

Duke University, Durham, North Carolina

Computing Committee

July 2019 - present

Michigan State University, East Lansing, Michigan

Orientation Speaker

Aug 2015 - May 2018

Held a question and answer session for new teaching assistants. Discussed the expectations and responsibilities of a recitation instructor.

Critical Function Service

Aug 2015 - May 2018

Served as graduate student communications.

Committee of the Whole

Aug 2014 - May 2018

Served as graduate student representative for department planning and decision making. Served as member of the Major Curriculum subcommittee.

Lead Teaching Assistant

Aug 2016 - May 2017

Mentored eight teaching assistants that taught Probability and Statistics for Business. Created and implemented peer teaching evaluations and early semester student-driven teaching evaluations.

NON-ACADEMIC
EXPERIENCE

Oneok Inc., Tulsa, Oklahoma

Energy Price Risk Analyst Intern

Aug 2012 - Aug 2013

Produced daily reports on natural gas and natural gas liquids positions. Calculated portfolio value-at-risk using Panorama software. Monitored traders' positions.

Kutztown University of Pennsylvania, Kutztown, Pennsylvania

Student Investment Analyst

Jan 2009 - Dec 2009

Actively managed approximately \$200,000 of the University's endowment fund. Led five students in the analysis and decision process of buying and selling stocks and bonds. Prepared and distributed weekly portfolio performance statements.

Fastenal Company, Reading, Pennsylvania

Intern

May 2008 - Aug 2008

Processed and delivered customer orders. Created an in-store marketing display for products. Assisted in inventory management.

COMPUTER
SKILLS

Computer Programming and Numerical Analysis

R, C/C++, MATLAB

Application Development

R Shiny

Editing and Productivity

L^AT_EX, Microsoft Office, Google Docs, Camtasia, Snagit

Operating Systems

Microsoft Windows, Linux

PROFESSIONAL
MEMBERSHIPS

American Statistical Association

International Chinese Statistical Association