## Karsten Tait Maurer

CONTACT Department of Statistics
INFORMATION Miami University

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Ph.D., Statistics, August 2015 Iowa State University, Ames IA

M.S., Statistics, December 2011 Iowa State University, Ames IA

B.A., Statistics and History, May 2009

Minor in Mathematics, Graduated with Distinction

University of Minnesota Morris, Morris MN

HONORS CAS Armstrong Interactive Media Studies Endowed Professorship Summer 2018

ISU Statistics Award for Undergraduate Mentoring Fall 2013 & 2014  $2^{\rm nd}$  Place in the 2013 ASA Data Expo Summer 2013 ISU Statistics Alumni Scholarship Fall 2009 - Spring 2010 University of Minnesota Morris Chancellor's Scholarship University of Minnesota Morris Dean's List Fall 2005 - Spring 2009

SPONSORED RESEARCH

**EDUCATION** 

ASA-NCTM Joint Committee [\$11750] - K12 Educators Workshop
Air Force Research Lab [\$10000] - Research Extension Grant
Air Force Research Lab [\$15500] - Visiting Faculty Researcher
Miami University [\$5000] - CAS Summer Research Appointment
Miami University [\$5000] - CFR Summer Research Appointment
Air Force Research Lab [\$21500] - Summer Faculty Fellowship

Summer 2019
Summer 2018
Summer 2018
Summer 2017
Summer 2017

## TEACHING EXPERIENCE

Assistant Professor

Fall 2015 - Present

Miami University, Oxford OH

- STA 301, Applied Statistics (1 Section)
- STA/IMS/JRN 404/504, Advanced Data Visualization (10 Sections)
- STA 467/567, Statistical Learning (2 Section)
- STA 477/600, Independent Studies in Statistics (7 students)
- STA 660, Data Practicum (1 Section Co-taught)
- STA 671, Environmental Statistics (1 Section)

Course Instructor

Fall 2012 - Summer 2015

Iowa State University, Ames IA

- Statistics 104, Introduction to Statistics (6 Sections)
- Statistics 305, Engineering Statistics (3 Sections)

Workshop Presenter

Summer 2012 - Fall 2014

Iowa State University, Ames IA

• "A Week of R" Workshops (seven full sequences)

## PUBLICATION

Miljkovic T., Miljkovic D., Maurer K., [In-Press] Examining the Impact on Mortality Arising from Climate Change: Important Findings for the Insurance Industry

Alessio H., Malay N., Maurer K., Bailer J., Rubin B. (2018), [In-Press] Interaction of Proctoring and Student Major on Online Test Performance (The International Review of Research in Open and Distributed Learning)

Alessio H., Malay N., Maurer K., Bailer J., Rubin B. (2017), Examining the Effect of Proctoring on Online Test Scores (Online Learning Journal)

Maurer K., Lock D. (2016), Comparison of Learning Outcomes for Randomization-Based and Traditional Inference Curricula in a Designed Educational Experiment (Technology Innovations in Statistics Education, Volume 8)

Anderson J., Burks S., Carpenter J., Goette L., Maurer K., Nosenzo D., Potter R., Rocha K., Rustichini A., (2013) Self-selection and variations in the laboratory measurement of other-regarding preferences across subject pools: evidence from one college student and two adult samples (Experimental Economics, 16(2), 170-189)

## **SUBMITTED** MANUSCRIPTS confidence

Maurer K., Bennette W., Facility Locations Utility for Uncovering Classifier Over-

Maurer K. Hudiburgh L., Werwinski L., Bailer A.J., Content Audit for P-value Principles in Introductory Statistics

Maurer K., Hudiburgh L., Werwinski L., Stake Your Claims: Comparing Probability Lab Activities using a Dice Game vs. Word Problems

Maurer K., Iterative Quantile Nearest-Neighbors

# **PREPARATION**

MANUSCRIPTS Maurer K., Bennette W., Wang Y., Underwood A., Bin-Weighted Ensemble Classifiers

> Maurer K., Vanderplas S., Hofmann H., Developing and Evaluating Loss Functions for Binned Scatterplots Under Random and Standard Binning Algorithms

> Maurer K., A Shiny New Opportunity for Students to Randomly Sample from Big Data Sources

PRESENTATION "Iterative Quantile Nearest-Neighbors" Joint Statistical Meetings, Vancouver BC July 2018

"Fantasy Basketball For Statistical Learning" Electronic Conference on Teaching Statistics, Online May 2018

"Bin-Weighted Ensemble Classifiers" Joint Statistical Meetings, Baltimore MD July 2017

"Traditional vs. Simulation-Based: Curricula Comparison in a Small Scale Educational Experiment" Joint Statistical Meetings, Chicago IL

"Comparison of Learning Outcomes from Traditional and

August 2014

August 2016

Randomization-Based Inference Curricula in a Designed Experiment" Joint Statistical Meetings, Boston MA

"A Shiny New Opportunity for Big Data in Statistics Education" July 2014 International Conference on Teaching Statistics, Flagstaff AZ

"Locating the Heart of the Community" August 2013 Joint Statistical Meetings, Montreal QC

"Using R to Construct a Graphical User Interface for an Interactive Fitness Log" Joint Statistical Meetings, Miami FL

## UNIVERSITY **SERVICE**

Spring 2018 Member, CAS Committee on Big Ideas in Digital Media Member, Dept. of Statistics Undergraduate Curriculum Committee Spring 2018 Member, Dept. of Statistics Grad Ed Committee Fall 2016 - Present Member, Miami Datafest Committee Fall 2015 - Present Member, Dept. of Statistics Hiring Search Committee Fall 2016 Panelist, New Faculty Orientation Panel Fall 2016 Volunteer, Careers Involving Quantitative Science (CIQS) Day Spring 2016/2017

## **SERVICE**

PROFESSIONAL Judge, Undergraduate Research Project Competition Summer 2016 Peer Reviewer, Journal for Statistical Education Spring 2016 - Present Peer Reviewer, The American Statistician Winter 2015 Member, Miami Datafest Committee Fall 2015 - Present

## COMMUNITY **SERVICE**

Instructor, Client Data Visualization Projects

Fall 2015 - Spring 2017

August 2011

- Miami EHWB Gym and Benefit Usage App
- Cincinnati Shakespeare Co. Ticket Sales App (Redesign)
- Butler County Health Interactive Infant Mortality Report App
- St. Louis County EMS Emergency Response Times App
- Scripps Gerontology Center Nursing Facility Survey App

## **OTHER** EXPERIENCE

Member, Miami University NFRC Fall 2016 Member, Miami University NFTEP Fall 2015 - Spring 2016 Member, ISU Graphics Working Group Fall 2009 - Summer 2015 Coordinator, ISU Graphics Working Group Spring 2014 Advisor, Midwest Undergraduate Data Analytics Comp. Spring 2013 and 2014 Attendee, Collaborative Undergraduate Research Workshop Fall 2014 Treasurer, STAT-ers Graduate Student Club Fall 2012 - Summer 2013 Consultant, ISU Survey and Behavioral Research Services Fall 2011 - Spring 2012 Online Homework Assistant, Stat 101 at ISU Fall 2010 - Summer 2011 Associate Researcher, UMM Trucking Safety Project Summer 2010 Lab Instructor, Stat 101 at ISU Fall 2009 - Spring 2010