Karsten Tait Maurer

Department of Statistics CONTACT

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EDUCATION

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

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

University of Minnesota Morris, Morris MN B.A., Statistics and History, May 2009

Minor in Mathematics, Graduated with Distinction

HONORS AND **AWARDS**

Department of Statistics Award for Undergraduate Mentoring

Fall 2013 & 2014 Summer 2013

 $2^{\rm nd}$ Place in the 2013 ASA Data Expo Iowa State Department of 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 Fall 2005 - Spring 2009

Fall 2015 - Present

TEACHING EXPERIENCE Course Instructor

Miami University, Oxford OH

Statistics 404 / 504, Data Visualization

- Instruct a mix of senior undergraduate and graduate students
- Topics include: R programming, graphical design, perceptual psychology, interactive displays and client consultation
- Prepare and grade the lecture materials, exercises and projects

Course Instructor

Fall 2014 - Summer 2015

Iowa State University, Ames IA Statistics 305, Engineering Statistics

- Instruct sections of 60 engineering students
- Topics include: experimental design, multiple linear regression, probability distributions, statistical inference and ANOVA
- Prepare lecture materials, homework and exams

Course Instructor

Fall 2012 - Summer 2014

Iowa State University, Ames IA

Statistics 104, Introduction to Statistics

- Conducted lecture and lab for sections of 60 students
- Prepare lecture materials, lab materials, homework, course projects and exams

Workshop Presenter

Summer 2012 - Fall 2014

Iowa State University, Ames IA

"A Week of R" Workshops

- Presenter for week long workshop on basic and advanced R programming skills
- Part of the team that developed and updated workshop materials
- Conducted the full workshop series seven times

Lab Instructor

Fall 2009 - Spring 2010

Iowa State University, Ames IA Statistics 101, Principles of Statistics

- Instructed lab sections of Stat 101
- Graded lab and homework for lab sections

PUBLICATION

Anderson J., Burks S., Carpenter J., Goette L., Maurer K., Nosenzo D., Potter R., Rocha K., Rustichini A., (2010) Self Selection Does Not Increase Other-Regarding Preferences Among Adult Laboratory Subjects. But Student Subjects May Be More Self-Regarding than Adults (IZA Discussion Paper No. 5389)

ACCEPTED PENDING **MINOR** REVISION

Maurer K., Osthus D., Loy A., A Tale of Four Cities: Exploring the Soul of State College, Detroit, Millidgeville and Biloxi (Accepted pending revision by COST on 12/19/14)

Maurer K., Lock D., Comparison of Learning Outcomes for Randomization-Based and Traditional Inference Curricula in a Designed Educational Experiment (Accepted pending revision by COST on TISE on 11/17/14)

PREPERATION

MANUSCRIPTS 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 "Comparison of Learning Outcomes from Traditional and August 2014 Randomization-Based Inference Curricula in a Designed Experiment" Joint Statistical Meetings, Boston MA

• Topic Contributed Presentation of study results

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

- Introduced and demonstrated the Shiny Database Sampler tool
- Discussed classroom applications and experiences

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

August 2013

- Awarded 2nd Place in the 2013 ASA Data Expo Poster Competition
- Teammates: Dave Osthus and Adam Loy

"The RecMiler Site: An R Based Online Widget for Interactive Fitness Logs" Iowa State University, Ames IA

October 2011

- Presentation of master's thesis to ISU graphics working group
- Followed by successful defense before Program of Study committee

"Using R to Construct a Graphical User Interface for an Interactive Fitness Log" Joint Statistical Meetings, Miami FL August 2011

• Topic Contributed Presentation on master's thesis research

OTHER EXPERIENCE

 $Midwest\ Undergraduate\ Data\ Analytics$

Spring 2013 and 2014

Competition Group Advisor

Winona State University, Winona MN

- Advised Iowa State student groups prior to and during MUDAC
- Group of advisees earned 2nd place during MUDAC 2014

Statistical Consultant

Fall 2011 - Spring 2012

Iowa State University, Ames IA

Survey and Behavioral Research Services (SBRS)

• Provided support for surveys affiliated with SBRS

Online Homework Assistant

Fall 2010 - Summer 2011

Iowa State University, Ames IA

• Developed online homework problems for statistics courses

Associate Graduate Student Researcher

Summer 2010

University of Minnesota Morris, Morris MN

Truckers and Turnover Project, Research group lead by Dr. Burks and Dr. Anderson

- Cleaned and analyzed data associated with project goals
- Helped undergraduate research assistants with coding and statistical issues

EXTRA-CURRICULAR ACTIVITIES

Member, ISU Graphics Working Group	Fall 2009 - Present
Attendee, Project LEAR/N workshop on teaching methods	Summer 2014
Coordinator, ISU Graphics Working Group	Spring 2014
Attendee, Collaborative Undergraduate Research Workshop	Fall 2014
Attendee, PREP workshop on randomization-based inference	Summer 2013
Member, Des Moines Summer Ultimate Frisbee League	Summer 2011 - 2013
Treasurer, STAT-ers Graduate Student Club Fa	ll 2012 - Summer 2013
Community Service Committee Member, STAT-ers Club	Fall 2010 - Fall 2012
President, Frisbee for Fun Club	Fall 2010 - Fall 2012