# Karsten Tait Maurer

**CONTACT INFORMATION**

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**EDUCATION**

Iowa State University, Ames IA
Ph.D., Statistics, expected 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**

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

**TEACHING EXPERIENCE**

*Course Instructor*                                     Fall 2014 - Present
Iowa State University, Ames IA
Statistics 305, Engineering Statistics
- Instruct a section 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 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)

**SUBMITTED MANUSCRIPTS**  **Maurer K.**, Osthus D., Loy A., *A Tale of Four Cities: Exploring the Soul of State College, Detroit, Millidgeville and Biloxi* (Submitted to COST on 06/13/14)

**Maurer K.**, Lock D., *Comparison of Learning Outcomes for Randomization-Based and Traditional Inference Curricula in a Designed Educational Experiment* (Submitted to TISE on 09/12/14)

**MANUSCRIPTS IN PREPERATION**  **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 Randomization-Based Inference Curricula in a Designed Experiment"*  August 2014
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"*  August 2013
Joint Statistical Meetings, Montreal QC
- 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"*  October 2011
Iowa State University, Ames IA
- 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"*  August 2011
Joint Statistical Meetings, Miami FL
- Topic Contributed Presentation on master's thesis research

| **OTHER EXPERIENCE** | *Midwest Undergraduate Data Analytics Competition Group Advisor* | Spring 2013 and 2014 |
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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**

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| *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 | Fall 2012 - Summer 2013 |
| *Community Service Committee Member*, STAT-ers Club | Fall 2010 - Fall 2012 |
| *President*, Frisbee for Fun Club | Fall 2010 - Fall 2012 |