Katherine Goode

CONTACT INFORMATION	2207 Snedecor Hall Department of Statistics 2438 Osborn Dr, Ames, IA 50011	*Email:* kgoode@iastate.edu *Phone*: 920-904-7072 *Website:* https://goodekat.github.io/

EDUCATION

Doctor of Philosophy, Statistics   Current
Iowa State University, Ames, IA
Expected Completion December 2020

Master of Science, Statistics   May 2015
University of Wisconsin, Madison, WI
Master's Examination Completed Fall 2014

Bachelor of Arts, Mathematics   June 2013
Lawrence University, Appleton, WI
Graduated Summa Cum Laude
Capstone Title: An Explanation of Double-Error-Correcting BCH Codes

Study Abroad
University of Granada   Summer 2012
Lawrence London Centre   Fall 2010

AWARDS

ISU Department of Statistics Dan Mowrey Consulting Excellence Award   2018
Awarded in recognition of outstanding contributions in the area of statistical consulting while working toward a graduate degree.

ISU Department of Statistics Award for Experiential Development   2017
Presented to a student for excellent performance in multiple statistical efforts as part of the graduate program.

Lawrence University Richard Warch Presidential Scholarship   2009-2013

RESEARCH INTERESTS

Data Visualization, Random Forest Models, Model Interpretation and Assessment, Generalized Linear Mixed Models, R Package Development

EMPLOYMENT

Agriculture Experiment Station, Iowa State University
Statistical Consultant   May 2016 - Current
Consult for graduate students, faculty, and staff from a wide range of departments at ISU on their research project. Provide statistical advice on analyses, writing code, and teaching proper statistical techniques. Train new consultants after first year of experience.

Iowa State University
Teaching Assistant   Spring 2016
Lectured for an introductory statistics course for non-statistics majors. Prepared and graded exams.

Research Administration Office, Lawrence University
Statistical Study Assistant September 2014 - June 2015, December 2015
Assisted with data collection and analysis for a study on the evaluation of warning lights installed at a busy crosswalk on the university campus.

Lawrence University
Lecturer of Mathematics September 2015 - November 2015
Taught an introductory statistics course for non-statistics majors. Organized the curriculum. Prepared and graded homework and exams.

University of Wisconsin, Madison
Teaching Assistant Fall 2013 - Spring 2015
Led discussions for several undergraduate and graduate level introductory statistics courses. Graded homework and exams. Held office hours and worked in the intro stats help room.

Center for Academic Excellence, University of Wisconsin, Madison
Academic Mentor Fall 2014 - Spring 2015
Mentored minority and first generation undergraduate students enrolled in statistics courses. Provided statistics tutoring and tips for academic success to students in individual instruction sessions.

CONTRIBUTED POSTERS

Goode, K. and Hofmann, H. "Using LIME to Interpret a Random Forest Model with an Application to Bullet Matching Data", Iowa State University Graduate and Professional Student Research Conference, Contributed Poster. April 2019.

Goode, K. and Rey, K. "Introducing ggResidpanel: An R Package for Easy Visualization of Residuals". Kansas State University Conference on Applied Statistics in Agriculture. Contributed Poster. May 2018.

SOFTWARE

`ggResidpanel` R package for easy visualization of model diagnostic plots, developed with Katie Rey (`https://goodekat.github.io/ggResidpanel/`)

TEACHING EXPERIENCE

Iowa State University

Seminar Leader Summer 2018
Predictive Plant Phenomics Graduate Student Bootcamp on Statistics (statistical concepts of randomization, confidence intervals, and design of experiments)

Instructor Spring 2016
Statistics 101: Introduction to Statistics (summary statistics, visualizations, normal distribution, hypothesis testing, confidence intervals, JMP)

Lawrence University

Instructor Fall 2015
Mathematics 107: Elementary Statistics (summary statistics, visualizations, randomization tests, bootstrap, normal distribution, hypothesis testing, confidence intervals, R)

University of Wisconsin, Madison

Teaching Assistant   Spring 2015
BMI 552: Regression Methods for Population Health Graduate Students (simple and multiple linear regression, logistic regression, survival analysis, SAS)

Teaching Assistant   Fall 2014
BMI 551: Introduction to Biostatistics for Population Health Graduate Students (summary statistics, visualizations, probability, normal distributions, hypothesis testing, confidence intervals, R)

Teaching Assistant   Summer 2014
Statistics 301: Introduction to Statistical Methods (summary statistics, visualizations, probability, normal distributions, hypothesis testing, confidence interval)

Teaching Assistant   Spring 2014
Statistics 302: Accelerated Introduction to Statistical Methods (summary statistics, visualizations, randomization tests, bootstrap, normal distribution, hypothesis testing, confidence intervals, R)

Teaching Assistant   Fall 2013
Statistics 371: Introductory Applied Statistics for the Life Sciences (summary statistics, visualizations, probability, normal distributions, hypothesis testing, confidence intervals, R)

Academic Mentor   Fall 2014 - Spring 2015
Mentor for students in introductory statistics courses at the University of Wisconsin, Madison.

Statistics Tutor   Fall 2014 - Spring 2015
Introductory Statistics Courses, University of Wisconsin, Madison

SERVICE   **Iowa State University**
Student representative to departmental faculty meetings   Fall 2018 - Current
STATcom (Statistics in the Community) member   Fall 2017 - Current

COMPUTING   Working Knowledge: GitHub, LaTeX, R, R Markdown, SAS
SKILLS   Basic Knowledge: JMP, SPSS