

KATHERINE GOODE

Statistician

My research focuses on the explainability and interpretability of machine learning models. Other research interests include model assessment, data visualization, and random forest models. My full CV is available [here](#).

EDUCATION

- 2021 • **Iowa State University**
Ph.D in Statistics 📍 Ames, Iowa

Thesis: [Visual diagnostics for explaining machine learning models](#)
- 2015 • **University of Wisconsin, Madison**
M.S. in Statistics 📍 Madison, Wisconsin
- 2013 • **Lawrence University**
B.A. in mathematics 📍 Appleton, Wisconsin



EXPERIENCE

- Current | 2021 • **Senior Member of Technical Staff**
Statistical Sciences, Sandia National Laboratories 📍 Albuquerque, NM
Research and development of statistical methods in application areas including climate and cyber security
- 2021 • **Postdoctoral Researcher**
Statistical Sciences, Sandia National Laboratories 📍 Albuquerque, NM
Researched use of elastic shape analysis with inverse models for functional data using and developed feature importance technique for echo state networks applied to climate data
- 2021 | 2019 • **Research and Development Intern**
Statistical Sciences, Sandia National Laboratories 📍 Albuquerque, NM
Developed explainable machine learning pipeline for functional data
Presented on work at internal and external events
- 2021 and 2019 • **Graduate Research Assistant**
Natural Resource Ecology and Management, ISU 📍 Ames, Iowa
Developed R Shiny application to predict taxonomy of fish eggs using random forests (2021) and assisted with analysis of toxicology study of monarch butterfly larvae exposed to insecticides (2019)
- 2020 | 2016 • **Statistical Consultant**
Agriculture Experiment Station, ISU 📍 Ames, Iowa
Provided statistical support on research projects for graduate students, professors, and staff across university departments

CONTACT INFO

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SKILLS

Statistical analyses, statistical learning, data visualization

GitHub, JMP, LaTeX, Python, R, R Markdown, R Shiny, SAS, SPSS

AWARDS

2019 Midwest Statistical Machine Learning Colloquium Poster Award

2018 ISU Department of Statistics Dan Mowrey Consulting Excellence Award

2017 ISU Department of Statistics Award for Experiential Development