

# 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 | <ul style="list-style-type: none"><li>● <b>Iowa State University</b><br/>Ph.D in Statistics</li></ul>            |  Ames, Iowa          |
|      | Thesis: <a href="#">Visual diagnostics for explaining machine learning models</a>                                |   |
| 2015 | <ul style="list-style-type: none"><li>● <b>University of Wisconsin, Madison</b><br/>M.S. in Statistics</li></ul> |  Madison, Wisconsin  |
| 2013 | <ul style="list-style-type: none"><li>● <b>Lawrence University</b><br/>B.A. in mathematics</li></ul>             |  Appleton, Wisconsin |



## EXPERIENCE

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|----------------------|---|
| Current<br> <br>2021 | <ul style="list-style-type: none"><li>● <b>Senior Member of Technical Staff</b><br/>Statistical Sciences, Sandia National Laboratories  Albuquerque, NM<br/>Research and development of statistical methods in application areas including climate and cyber security</li></ul>  |
| 2021                 | <ul style="list-style-type: none"><li>● <b>Postdoctoral Researcher</b><br/>Statistical Sciences, Sandia National Laboratories  Albuquerque, NM<br/>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</li></ul>             |
| 2021<br> <br>2019    | <ul style="list-style-type: none"><li>● <b>Research and Development Intern</b><br/>Statistical Sciences, Sandia National Laboratories  Albuquerque, NM<br/>Developed explainable machine learning pipeline for functional data<br/>Presented on work at internal and external events</li></ul>   |
| 2021 and<br>2019     | <ul style="list-style-type: none"><li>● <b>Graduate Research Assistant</b><br/>Natural Resource Ecology and Management, ISU  Ames, Iowa<br/>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)</li></ul> |
| 2020<br> <br>2016    | <ul style="list-style-type: none"><li>● <b>Statistical Consultant</b><br/>Agriculture Experiment Station, ISU  Ames, Iowa<br/>Provided statistical support on research projects for graduate students, professors, and staff across university departments</li></ul>   |

## CONTACT INFO

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- ⌚ [goodekat.github.io](https://goodekat.github.io)
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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