

Katy Miles

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Education

Colorado State University

Master of Science in Statistics

Will complete May, 2024

Fort Collins, CO

University of Illinois at Urbana-Champaign

2022

Bachelor of Science in Statistics, Minor in Geography and GIS, Certificate in Data Science

Urbana, IL

Campus Honors Program | LAS Dean's List | Highest Distinction in Statistics

Research

Statistical Consulting Project | Advisor: Dr. Ann Hess

2023

- Perform statistical analysis on data relating to cheddar cheese in order to determine if starter culture application has an impact on sensory characteristics.
- Fit mixed models and computed contrasts between treatments for sensory characteristics using R

CHP Summer Research Grant | Advisor: Dr. Wade Fagen-Ulmschneider

2022

- Develop interactive visualizations using Javascript, CSS, and HTML to highlight historical distributions of national maximum and minimum temperature data.

Senior Thesis | Advisors: Dr. Wade Fagen-Ulmschneider and Dr. Karle Flanagan

2021-2022

- Perform a literature review on climate visualizations with a focus on localized visualizations
- Develop interactive climate visualizations using Javascript, CSS, and HTML to display yearly weather patterns using NOAA daily weather data
- Allow the option to customize the visualization for specified locations (1,000 total cities)

Work Experience

Web Developer

DAWN - Dashboard for Agricultural Water Use and Nutrient Management

2023-Present

- Create visualizations in python and javascript for the DAWN website to inform farmer decision making
- Utilize MongoDB to access temperature and precipitation data bases

Graduate Statistical Consultant

- Consult researchers and graduate students in a wide range of fields on statistical analysis
- Aid in statistical interpretation and statistical software usage

2023- Present

Graduate Teaching Assistant

2022-Present

Colorado State University

- Acted as sole instructor for summer online session of STAT 301
- Facilitated weekly recitation sections for STAT 201: General Statistics

Statistical Analyst

2020-2022

U.S. Geological Survey - Midwest Science Center

- Develop a python package for efficient Seasonal-Trend decomposition using Fast Fourier Transform
- Develop, test, and document R code using web-based Git repositories for statistical analyses
- Import, parse, manage, analyze, and visualize large environmental data sets

Lead Undergraduate Course Assistant

2020-2022

University of Illinois at Urbana-Champaign: STAT 107: Data Science Discovery

- Attend weekly labs and office hours to answer student questions and help with course development by writing lecture review questions accessible on the public course website

Skills

Technical Skills: R, Python, Javascript, D3.js, HTML, CSS, Markdown, Jupyter Notebook, GitHub, ArcGIS

Communication Skills: Poster Presentation Experience, Classroom teaching