

Status: Statistical Consultant for Statistical Consulting Center, Baylor University

Field: Data Science, Statistical Analysis

Techs: R, bash, Python, Regression, Machine Learning

Waco, Texas natebyford.com nate@natebyford.com

## Summary

Ph.D. student at Baylor University working on projects in spatial statistics, anomaly detection, bayesian modeling, and computational statistics. In addition to working on research I also work for the statistical consulting center helping clients from a wide range of fields from social work to geosciences. Experienced in data manipulation, visualization, and multiple modeling techniques.

## Experience

Statistical Consultant - Statistical Consulting Center, Baylor University

Sep. 2023 - Present

- \* Perform statistical analysis for diverse range of clients and projects
- \* Analyses of large scale and unstructured data sets with R and Bash
- \* Present restults in clear and elementary manner for clients

Graduate Teaching Assistant - Baylor University

Aug. 2022 - Aug. 2024

- \* Teach suplimental instruction sessions for introduction to statistics
- \* Hold office hours for introcutory statistics and statistical methods
- \* Grade homework, quizzes, and exams

Undergraduate Researcher - Oregon State University

June 2021 - Aug. 2021

- \* Developing new methods to test for Benford's law
- \* Implementing methods in R
- \* Compared tests for greatest power and error rate
- \* Also looked into Benfor's law in english words

Data Science Fellow - Baylor University

June 2020 - Aug. 2020

- \* Worked directly with stakeholders at Denver Water to analyze effectives and efficiency of water filtration
- $\ ^*$  Produce statistical analysis and interpret results

## Education

Ph.D. in Statistical Science - Waco, Texas

Aug. 2022 - Aug. 2026

(Present)

- \* Project: Correcting under-reporting in over-dispersed spatial count data
- \* Developing and implementing Bayesian method to model under-reported and over-dispersed spatial counts

Master of Science in Statistical Science - Waco, Texas

Aug. 2022 - Dec. 2023

- \* Project: Anomaly Detection in Time Series Data
- \* Focus on Statistical Methods, Mathematical Statistics, and Computational Statistics.