

MICHAEL ELLIS

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PROFILE

- Highly self-motivated and productive data scientist experienced in time series analysis, forecasting, complex regression, classification, clustering and Bayesian methodology.
- Experienced with R, Python, C++, SQL and Git.
- Expert communicator able to clearly explain risk, methods, and results to executive leadership, clients, and colleagues.

WORK EXPERIENCE

Data Scientist, Black Hills Energy

Fayetteville, AR

December 2018 - March 2020

- Directly responsible for building statistical models that are used as dynamic decision-support tools for analyzing and predicting weather and energy consumption, with the goal of helping senior business leaders quantify and communicate risk in revenue projections.
- Forecasted energy demand for 1.2M customers in 8 states improving accuracy by 14% and reducing budget variance by \$100M using advanced time series methods.
- Applied Bayesian hierarchical linear model to estimate the association between unemployment rate, natural gas prices, and unpaid bills.
- Developed R-Shiny web application to calculate the optimal climate normal for each NOAA weather station in the companys service territory.
- Partnered with NOAA to ingest and analyze over 2.2 billion weather data points to produce climate and weather models.

Graduate Teaching Assistant, University of Arkansas

Fayetteville, AR

August 2016 - May 2018

- Taught Principles of Statistics (STAT 2303). Fall 2017, Spring 2018.
- Taught Pre-Calculus recitation (MATH 1284). Fall 2016, Spring 2017.
- Student evaluations:
 - “Michael is a great teacher who cares about his students and always tries to help. He thoroughly enjoys stats and helps you apply it to the real world.”
 - “Michael is very good at making difficult things understandable and he is also very concerned with how everyone is doing, which is awesome!”

EDUCATION

University of Arkansas, Fayetteville

Master of Science, Statistics

August 2016 - December 2018

University of Arkansas, Fayetteville

Bachelor of Science, Mathematics.

August 2012 - May 2016