

EDUCATION

University of North Carolina at Chapel Hill

May 2021

Bachelor of Science in Statistics and Analytics

Bachelor of Science in Computer Science

Relevant Coursework: Machine Learning, Introduction to Time Series, Introduction to Data Science, Files and Databases, Methods of Data Analysis, Data Structures, Stochastic Modeling, Algorithms & Analysis

PROJECT EXPERIENCE

Carolina Data Challenge, UNC Chapel Hill

CDC 2019 Feed-grains Agricultural Dataset Analysis

October 2019

- Participated as a team of four in a data science hackathon analyzing the CDC 2019 Feed-grains Agricultural Dataset
- Joined weather data gathered from the National Oceanic and Atmospheric Administration and price of feed grains from CDC's 2019 agricultural dataset to create a single dataframe that contained the price of feed grains and weather features for each state
- Created ridge regression, LASSO, and principal component regression models that predicted feed grain prices based on weather features for each state using glmnet in R
- Displayed the price of grains across the United States on an interactive map, as well as national weather features over time on a dashboard created with tableau
- Won 1st Place in Best Use of Outside Data

North Carolina 2018 HMDA Home Purchase Loan Applications Analysis

October 2020

- Participated as a team of four in a data science hackathon analyzing the North Carolina 2018 HMDA Home Purchase Loan Applications Dataset
- Used R and Python to perform exploratory data analysis focusing on loan approval rates across North Carolina counties
- Displayed the average loan amount of approved loans and loan approval rate by county on interactive maps, as well as graphs for the top five mortgage lenders and their approval rates created in tableau

Dota2 Text Analytics Win Percentage Model

December 2019

Machine Learning Class

- Collaborated on a team of 4 to develop a model that predicts win percentage from in-game chat for the game Dota2
- Used the R package OpenDataR to retrieve fully parsed match data containing match outcome and the chat logs of each team for over 30,000 games from OpenData API
- Created naïve bayes, k-nearest neighbors, decision tree, principal component analysis, and random forest models using sklearn in python

Spotify Guessing Game

November 2020

Web Development Class

- Collaborated on a team of 4 to develop a game which the player had to guess the song title or artist from a fifteen second song clip
- Used Spotify API to retrieve the fifteen second song sample that is played, as well as artist and song name
- Created a No-SQL database using Cloud Firestore to store user scores and usernames that are shown on the website's leaderboard

TECHNICAL SKILLS

- Python (pandas, numpy, sklearn), R (dplyr, ggplot2, tseries, caret), Structured Query Language, Tableau, MATLAB