Wayne Ji

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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

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 predicated 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
- https://tinyurl.com/HDMA2019

North Carolina 2018 HDMA Home Purchase Loan Applications Analysis   October 2020
- Participated as a team of four in a data science hackathon analyzing the North Carolina 2018 HDMA 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 graphs for the top five mortgage loaners and their approval rates created in tableau
- https://jubilee11.wixsite.com/sanchenji

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
- https://github.com/SriganeshG/Text-Mining-in-DotA-2

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
- https://guessify.rocks/index.html

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