Scott Breitbach  
DSC680, Weeks 1-4  
01-July-2022

Portfolio: Milestone 1

List of Projects

# Effect of Home Cornhusker Football Games on Public Safety

[[Link](https://github.com/ScottBreitbach/DSC630/blob/main/Project/Modeling_Scott.pdf)] Use R for analysis of crime and traffic incidents in Lincoln, NE on game weekends compared to non-game weekends.

# Impact of immigrant grandparents on an individual’s income

[[Link](https://github.com/ScottBreitbach/DSC530/blob/master/BreitbachScott_DSC530_FinalProject.ipynb)] Python analysis to determine whether having grandparents born outside of the US has a significant impact on the income of an individual or family? [[PowerPoint](https://github.com/ScottBreitbach/DSC530/blob/master/BreitbachScott_DSC530FinalPresentation.pptx)]

# Web scraping and SQL with Nebraska breweries

[[Link](https://github.com/ScottBreitbach/DSC540/blob/main/Final%20Project/BreitbachScott_DSC540_Milestone5.ipynb)] Use Python for scraping tables on the web to collect data. Cleaning data into a useful format and combining using SQL joins. Standardization of addresses and phone numbers, and geographic mapping of brewery locations.

# Categorization of Beans using Machine Learning

[[Link](https://github.com/ScottBreitbach/DSC550/blob/main/FinalProject/BreitbachScott_DSC550_Milestone5.ipynb)] Multiclass classification of 7 bean species based on measurements. Includes EDA, visualization, standardization, feature selection, and evaluation of several models, including hyperparameter tuning.

# Housing Price Modeling

[[Link](https://github.com/ScottBreitbach/DSC630/blob/main/Project/Modeling_Scott.pdf)] Use R for analysis of different methods for predictive modeling of housing prices using different groups of features generated previously through an assortment of feature selection methods in Python.

# Airline Safety Infographic

[[Link](https://github.com/ScottBreitbach/DSC640/blob/main/Project/Task4/5-3_Project_Task4_infographic.pdf)] Infographic demonstrating the safety of flying, from the perspective of an airline customer.

# Airline Safety Dashboard

[[Link](https://github.com/ScottBreitbach/DSC640/blob/main/Project/Task1/2-3_Project_Task_1-Dashboard.pbix)] Use of Power BI for interactive dashboard showing summary of airline flights and accidents over time and by flight type, aircraft type, location, and fatalities. [[PDF](https://github.com/ScottBreitbach/DSC640/blob/main/Project/Task1/2-3_Project_Task_1-Dashboard.pdf)]

# Automation of Microbe Identification

[[Link](https://github.com/ScottBreitbach/DSC680/blob/main/Project1/BreitbachScott_DSC680_Project1.ipynb)] Use of Machine Learning in Python for multiclass classification from an unbalanced dataset to aid in rapid identification of microbes.

# Placeholder

Placeholder for Project 2

# Placeholder

Placeholder for Project 3