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Ten Projects Portfolio

1) Crime Rates: Are selected crimes more dominant in different states compared to others?

   Utilizing website data, flat file and API that measures if selected crimes occur more likely in certain states than others. This analysis is done with pandas packages in python.

2) Identifying High Risk Patient Survival

   Utilizing exploratory data analysis in python to see if Covid deaths had any correlation amongst ethnicity, race, gender, and other factors.

3) Python Weather Application

   An application that was created in python that utilizes API feeds to grab weather data based off specific user requests.

4) Predicting Fuel Efficiency

   Utilizing linear regression to predict fuel efficiency of specific car models based off horsepower, weight, acceleration, and cylinders.

5) Creating Sentiment Analysis Model

   Utilizing sklearn analysis to create sentiment analysis and natural language processing to identify the “emotional tone” of a passage or text.

6) Feature Selection and Dimensionality Reduction Analysis

   Utilizing python to identify the difference between feature selection and dimensionality reduction analysis. As many datasets are dimensional with a selected number of features, knowing the difference in selection would be beneficial.

7) Best Model Selection and Hyperparameter Tuning

   Utilizing model selection and overfitting to calculate the best model that fits best to the dataset.

8) Building a CNN Image Classifier

   Utilizes python with packages keras, and tensorflow to identify image recognition.

9) Predicting Type 2 diabetes to identify potential high-risk patients.

Utilizes a Kaggle dataset that consists of type 1 diabetes, type 2 diabetes and non-diagnose patient dataset to identify specific demographic variables or lab values to identify high-risk patients.

10) Airline Safety

The creation of power bi dashboards that shows if it is safe to use air travel or not. All visuals are interactive and give the user the ability to decide through several visuals if there has been an increase or decrease in fatalities and accidents.