

Data Science Final Capstone Proposal

- What is the problem you are attempting to solve?
 - Implementation of unsupervised and supervised machine learning techniques to classify sound commands. This is useful as a first step in automating voice commands in systems such as alexa and other voice recognition software implementations
- How is your solution valuable?
 - Solutions to this type of problem provide a means to change how humans interact with computers and computing technologies. This can already be seen with the explosion of software that can do voice recognition with capabilities such as speech to text, voice commands etc
- What is your data source and how will you access it?
 - I will be using the google voice command dataset, which is freely available and downloadable through google
- What techniques from the course do you anticipate using?
 - I will be using SVM, Random Forests and Convolutional Neural Networks
- What do you anticipate to be the biggest challenge you'll face?
 - Determining the correct features to use in the models and tuning the parameters to give the best performance