

Human Words Classification

By Anderson Varela

Problem at hand

- This project is about trying to classify whether or not an audio contains a human word or not. This of course is limited to the words cat, dog, and bird. This is because human languages are so extensive that trying to even classify human words for one language is beyond the scope of this class.

Methods Used

- There are various methods I tried using in order to increase accuracy of test results. These methods include amplifying sounds and adding more features to use in the algorithms. Ultimately I ended up using KNN, Logistic Regression, Random Forest, XGboost, and Neural Network. All of them with varying degrees of accuracy.

Results:

- KNN : 85.2%
- Logistic Regression: 85.2%
- Random Forest: 80.6%
- XGboost: 82%
- Neural Network: 87%