

AD/CLICK FRAUD YOUTUBE VIDEOS

How to detect Videos promoting Ad/Click
Fraud



**DATASET:
YOUTUBE VIDEOS
AD FRAUD
DATASET**

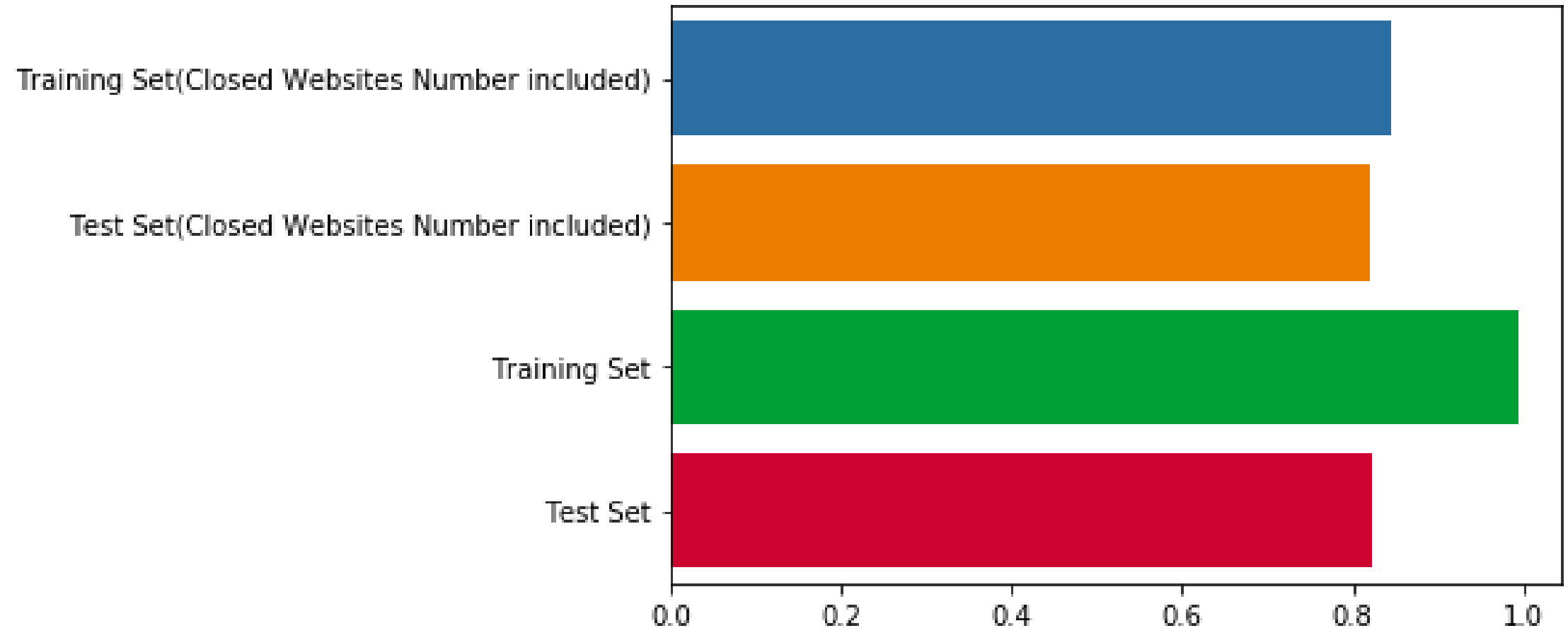
Dataset Has Following Features:

- Video_id
- Video_link
- Description
- Links(given in Description)
- Classification(as Fraudulent or Benign)

Number of Records = **1065**

STATISTICAL INFERENCE/
MACHINE LEARNING
MODELS USED

- Tf-idf Vectorizer used on Description
- SelectKBest
 - Present in `sklearn.feature_selection`
 - Used with chi-squared as Score Function
 - Used on Vectorized Features Obtained from Descriptions.
 - Select $k=940$ best features from these Vectorized Features
- `train_test_split` (from `sklearn.feature_selection`) is used to split train and test data
- `LogisticRegressionCV` (from `sklearn`) is used to predict benign or fraudulent videos



INTERESTING FINDINGS/RESULTS

For Ad-Fraud research dataset must be up to date, and comprehensive because

- Fraudulent Videos are removed over time by Youtube
- Fraudulent Videos change their address or stop working in small amount of time.

Youtube Video Descriptions

- contain unique words specific to a specific video
- Problem of overfitting.
- Handled by using the k best features

Insights

- Ad Fraud Datasets must be comprehensive and Up to Date
- Selecting only the best features from Descriptions
 - Less Time for the model to train
 - Handles Overfitting

NEW THINGS LEARNT

- Tf-Idf Vectorizer
- SelectKBest
- Confidence Scores



THANK YOU