

WHAT MAKES TED TALKS WORTH SPREADING?

Exploration of the linguistic and text features of TED video transcripts

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GOALS

- ✓ Predict the number of views for each video.
- ✓ Build a classifier in order to predict the gender of the presenters.
- ✓ Create a classification model to accurately classify the multiple topic tags of each video from text (bag of words).



DATASET

Shared on data.world - Words of Persuasion: Text Predictors of Persuasive TED Talks*

2406 TED Video Transcripts & Other Video Features

Total 187 Features including:

Linguistic Inquiry Word Count (LIWC)
Morality Word Counts



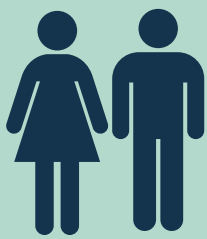
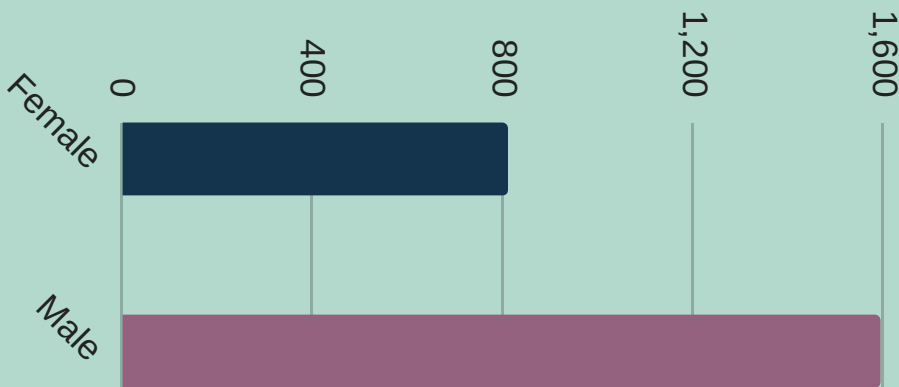
VIDEO TOPICS



423 Unique tags in the original dataset

Reduced to 22 for multi label classification

GENDER VARIABLE



gender-guesser library
genderize.io
manually looking up the names



PREDICTION MODELS

VIEW PREDICTION



GENDER PREDICTION



TOPIC CLASSIFICATION



Best Model

R-Squared

0.55

RMSE

0.68

Best Model: Logistic Regression

Baseline Accuracy

0.67

Model Accuracy

0.72

	Precision	Recall
Female	0.61	0.39
Male	0.75	0.88

TextBlob

Lemmatized

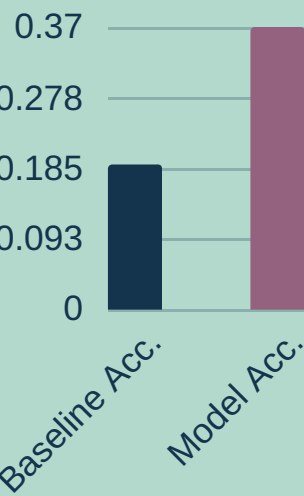
CountVectorizer

Tf-idf transformer

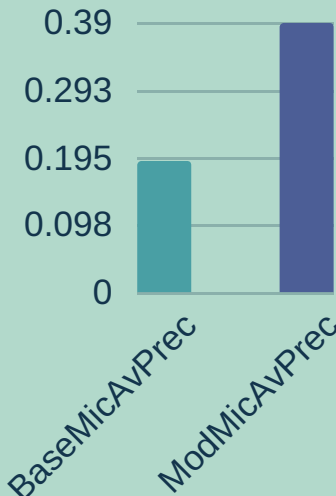


OneVSRestClassifier(KNN)

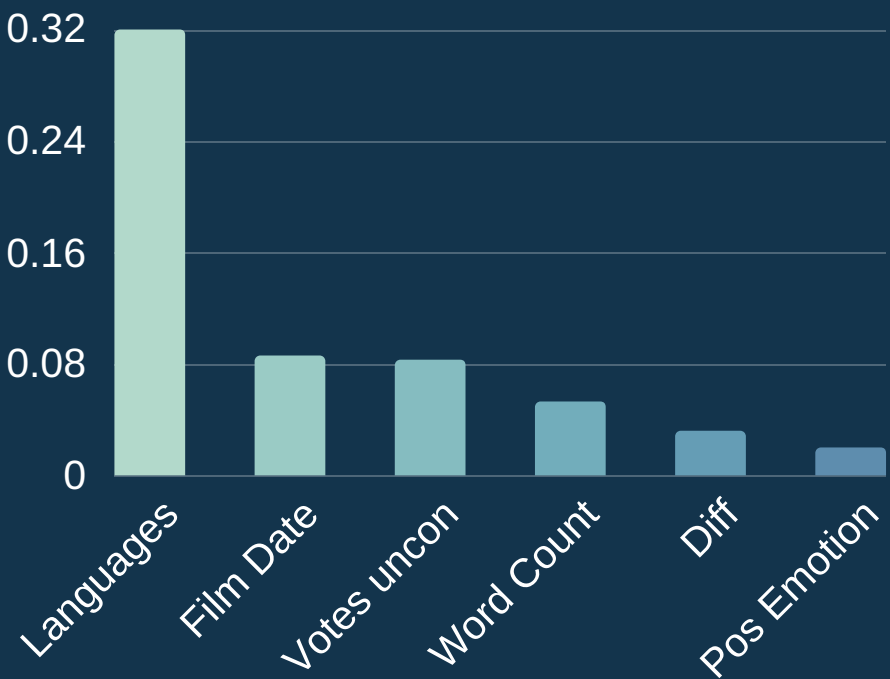
Accuracy



Precision



FEATURE IMPORTANCES



ROC CURVES



PRECISION - RECALL CURVES

