GET A SONG FOR YOUR MOOD

API sentiment recognition

JULY, 2020 | JORGE DONCEL

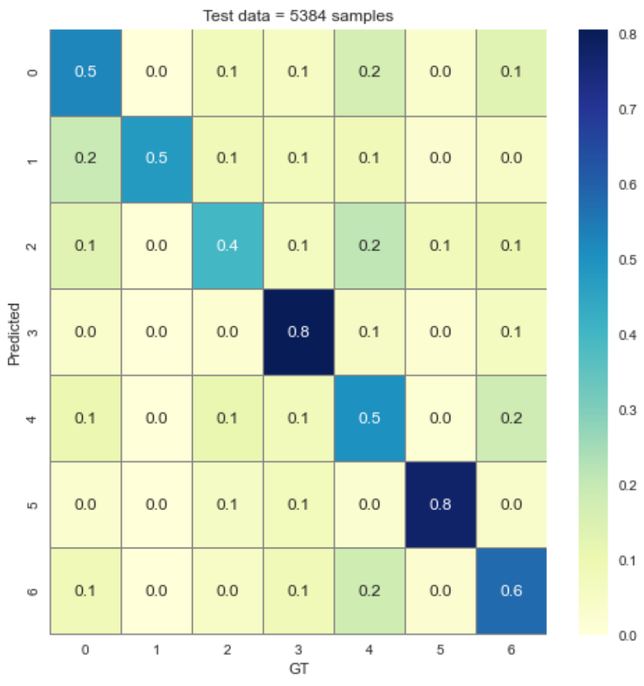
OBJECTIVES

CREATE AN API WHERE YOU SEND A PHOTO AND, DEPENDING OF YOUR FACIAL EXPRESSION, GET A SONG FOR YOUR MOOD.

HOW?

TRAIN 2 NN MODELS WITH DIFFERENTS DATASETS

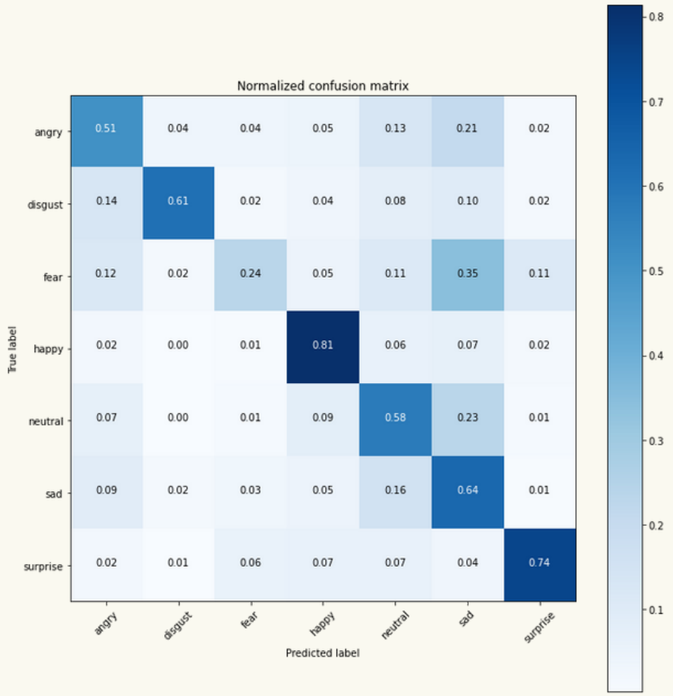
FER MODEL



ACCURACY 0.6142

Model select

TRAIN/VALIDATION



ACCURACY= 0.6155

Libraries

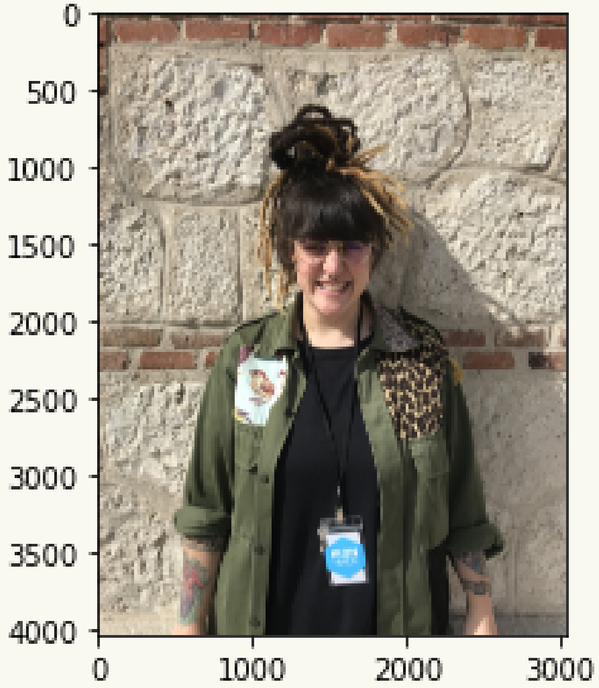
Keras

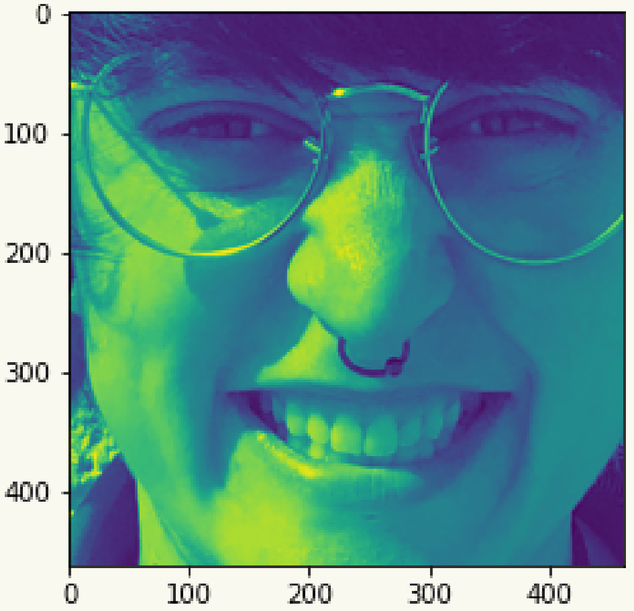
Pandas

Numpy

FACE RECOGNITION

- Recognize a face
- Take the coordenates
- Cut the photo
- Transform to gray scale
- Resize 48x48





Libraries

cv2

face_recognition

SONGS

Spotify database 18.454 songs

Keep songs with english lyrics

Analize lyrics sentiments

Categorize songs depends of mood

Sad = Energy & Positive

Happy = Danceability & Energy

Fear = Liveness & Positive

Disgust = Negative & Acousticness

Angry = Energy & Liveness

Surprise = Acousticness & Instrumentals

Neutral = Neutral

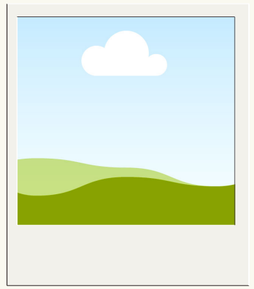
Library

NLTK

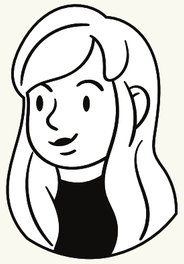
API

HOW DOES IT WORK

Upload a photo

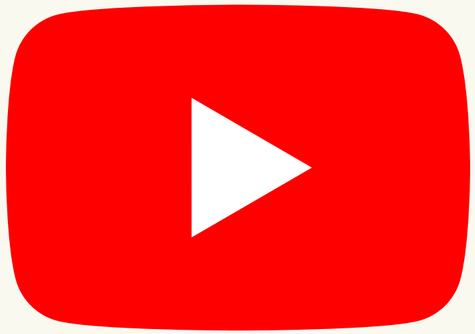


Face and sentiment recognition



Song selection for your mood

Get Youtube url song

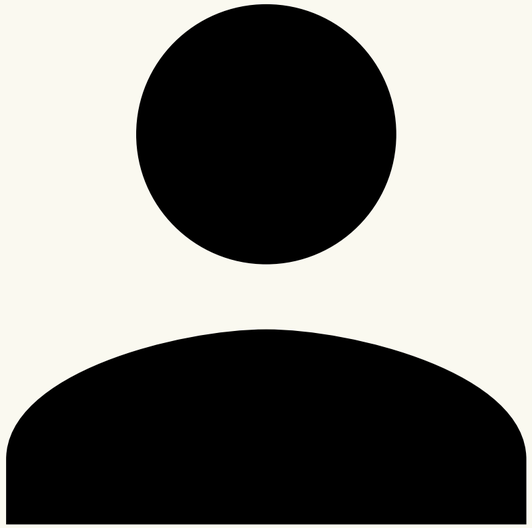


You get your song!

FUTURE IMPROVEMENTS

USER

Allow users to decide which songs they like to listen according to their mood



COVID-19 ERA

Recognize photos where the person wear a mask

READY TO TRY IT?

APISONGSFACE.HEROKUAPP.COM