

# Emotion Analytics with Face Recognition and Twitter

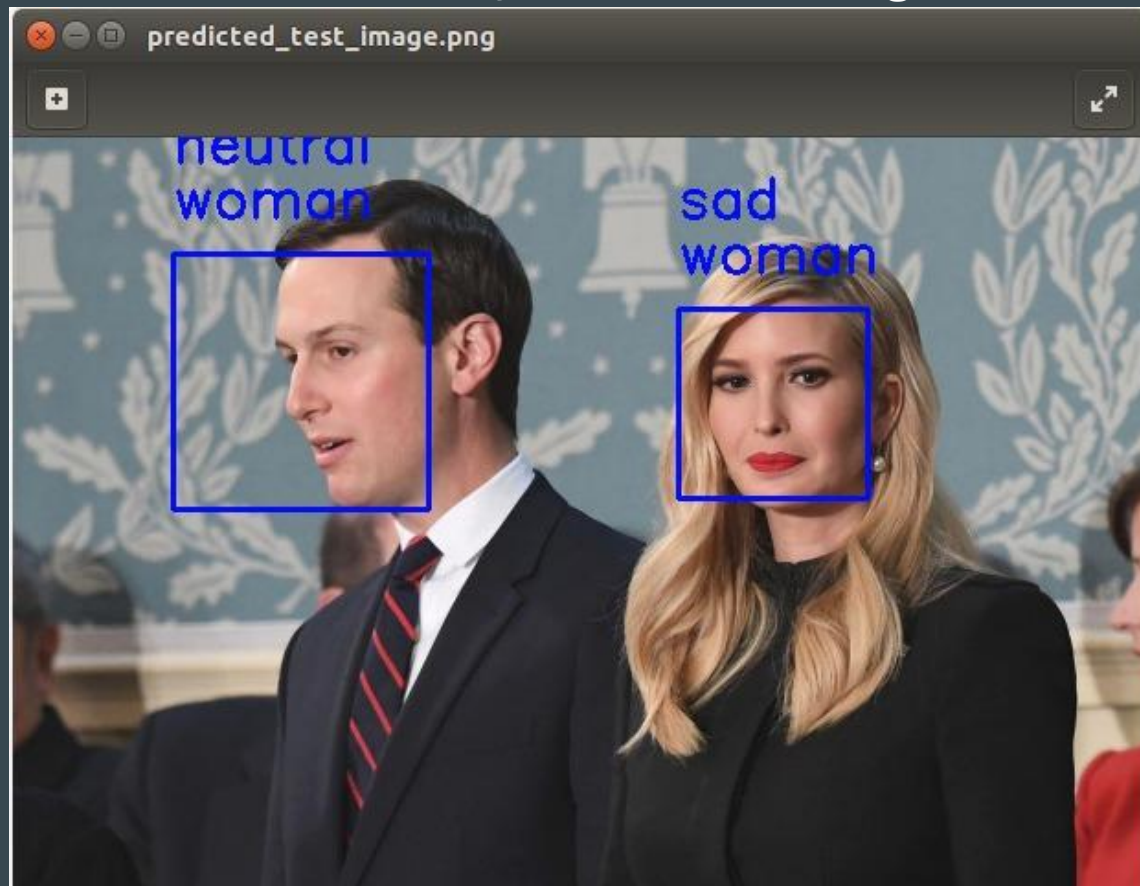
...

Harshil, Mehul, Yong

# Emotion Analytics From Face Image



## Emotion Analytics From Face Image



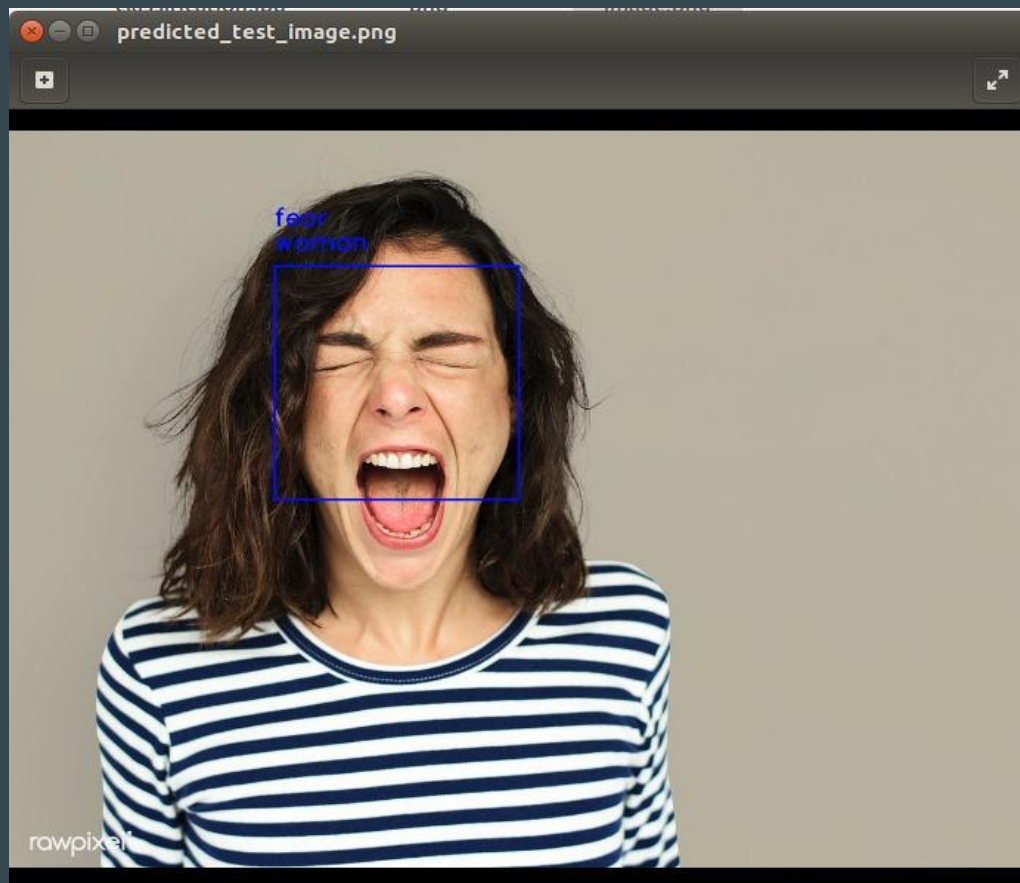
# Emotion Analytics From Face Image

```
harshil@harshil-VirtualBox: ~/face_classification/src
harshil@harshil-VirtualBox:~/face_classification/src$ python3 image_emotion_generator.py test4.jpg
Using TensorFlow backend.
/home/harshil/.local/lib/python3.5/site-packages/h5py/__init__.py:34: FutureWarning: Conversion of the second argument of issubdtype from `float` to `np.floating` is deprecated. In future, it will be treated as `np.float64 == np.dtype(float).type`.
  from ._conv import register_converters as _register_converters
2019-05-02 21:20:16.218675: W tensorflow/core/platform/cpu_feature_guard.cc:45]
The TensorFlow library wasn't compiled to use SSE4.1 instructions, but these are
available on your machine and could speed up CPU computations.
2019-05-02 21:20:16.218836: W tensorflow/core/platform/cpu_feature_guard.cc:45]
The TensorFlow library wasn't compiled to use SSE4.2 instructions, but these are
available on your machine and could speed up CPU computations.
2019-05-02 21:20:16.218921: W tensorflow/core/platform/cpu_feature_guard.cc:45]
The TensorFlow library wasn't compiled to use AVX instructions, but these are av
ailable on your machine and could speed up CPU computations.
harshil@harshil-VirtualBox:~/face_classification/src$
```

# Emotion Analytics From Face Image

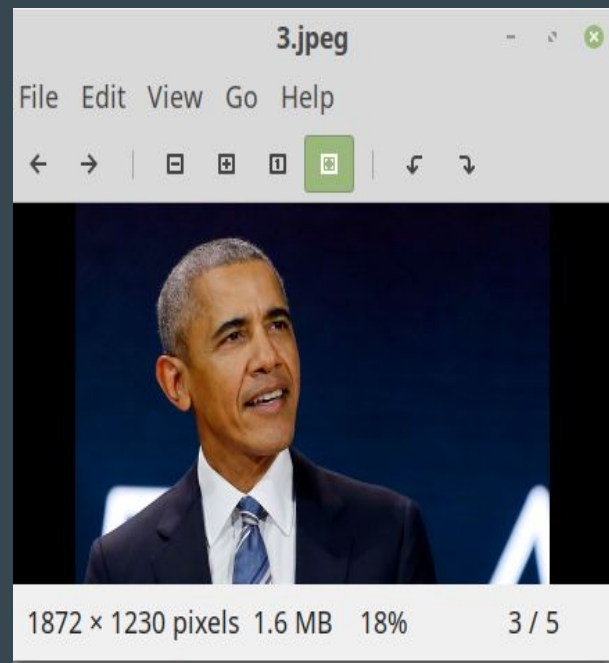
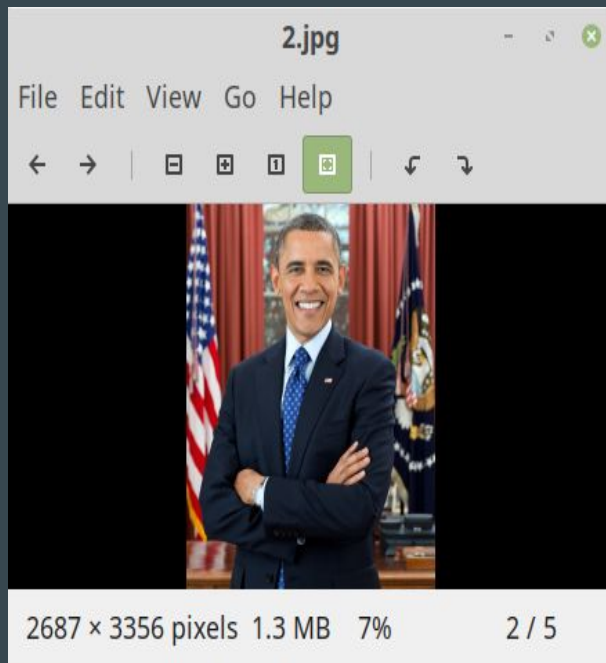


# Emotion Analytics From Face Image

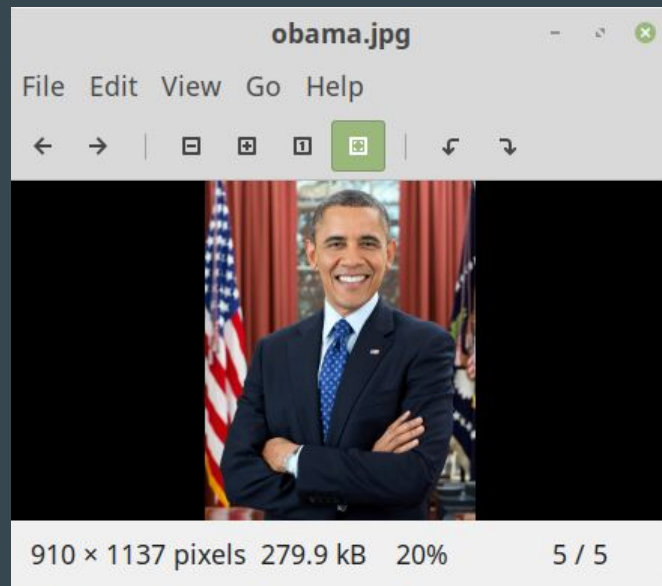
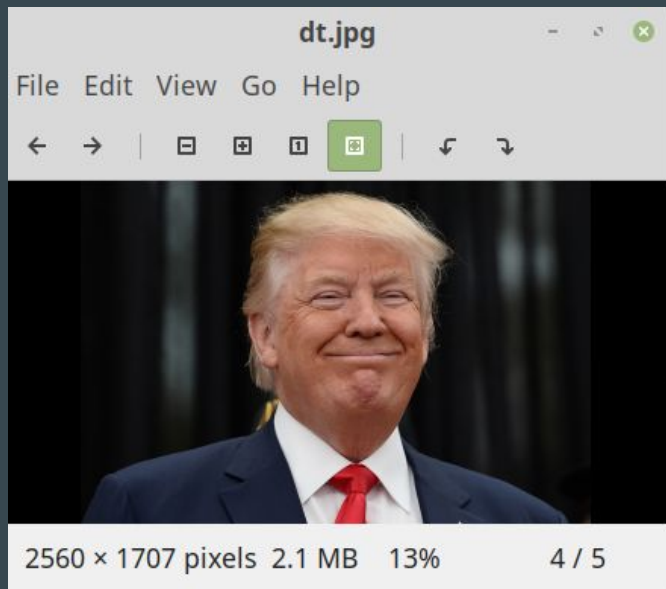




# Emotion Analytics From Face Image - Training dataset



## Face recognition with name mapping - Testing dataset





## Face recognition with name mapping - Result

```
(iot_project) yong@workstation:~/Desktop/GitHome/IOT/Project$ python fr.py obama.jpg  
Is the input face a picture of Obama? True
```

```
(iot_project) yong@workstation:~/Desktop/GitHome/IOT/Project$ python fr.py dt.jpg  
Is the input face a picture of Obama? False
```

## Sentiment analysis from tweets

```
yong@workstation:~/Desktop/GitHome/IOT/Project$ python3 tweet_polarity.py brycesub  
Counter({'neutral': 106, 'positive': 59, 'negative': 34})
```

```
yong@workstation:~/Desktop/GitHome/IOT/Project$ python3 tweet_polarity.py realDonaldTrump  
Counter({'positive': 77, 'neutral': 76, 'negative': 46})
```

```
yong@workstation:~/Desktop/GitHome/IOT/Project$ python3 tweet_polarity.py BarackObama  
Counter({'positive': 120, 'neutral': 59, 'negative': 21})
```