



Name- Section/Group –

UID-

Semester – 1st Subject –Disruptive Technologies

Subject Code -21SPH-141 Branch - CSE

EXPERIMENT 2.2

Aim :

Emotion and Gesture Detection.

Tool Used:

Google Collab

Basic Concept/ Command Description:

Deepface is a lightweight face recognition and facial attribute analysis (age, gender, emotion and race) framework for python. It is a hybrid face recognition framework wrapping state-of-the-art

models: VGG-Face, Google FaceNet, OpenFace, Facebook DeepFace, DeepID, ArcFace and Dlib.

Those models already reached and passed the human level accuracy. The library is mainly based on Keras and TensorFlow.

Code and Observations, Simulation Screen Shots and Discussions:

Install Deepface









#Import DeepFace

```
[ ] from deepface import DeepFace

Directory /root /.deepface created
Directory /root /.deepface/weights created
```

#Import Computer vision library and Matplotlib

```
[ ] import cv2
import matplotlib.pyplot as plt
```

#Upload Happy Man image and show it using pyplot

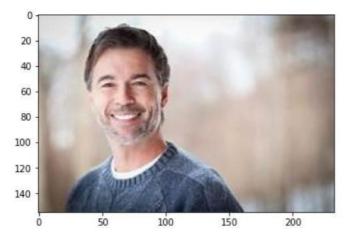






```
[ ] import cv2
  import matplotlib.pyplot as plt
  img1=cv2.imread("/content/happy.jpeg")
  plt.imshow(img1[:,:,::-1])

plt.show()
```



#Analyze Image (emotion)

#Analyze Image (age)

```
[ ] result-DeepFace.analyze(img1, actions = ['age'])

Action: gender: 100%| 3/3 [00:01<00:00, 1.90it/s]

[ ] print(result)

{'age': 32, 'region': {'x': 33, 'y': 27, 'w': 70, 'h': 70}, 'emotion': {'angry': 2.028009251150747e-15, 'disgust': 7.346957871075555e-22, 'fear': 1.080158117765949e-14,
```

#Analyze Image (gender)







| Downloading... | From: https://github.com/serengil/deepface_models/releases/download/v1.0/gender_model_weights.h5 | To: /root/.deepface/weights/gender_model_weights.h5 | To: /root/.deepface/weights/gender_model_weights.h5 | gender_model_weights.h5 | gender_model_weights.h5 | Jank | Jank

