Emotion detection system/Pypower project

3 steps in this project:

Collecting dataset for various emotion:

Created 5 classes for 5 different emotions:

Angry happy Neutral Sad Surprise

Applying deep learning for training the model:

Import the required libraries

Use the images and labels for training the model

Train the model using keras and tensorflow based on given parameters

Using the model to predict the emotion:

Faceclassifier file(xml file) to detect the face

Emotion\_detection.h5 file(pertained model) to detect the emotion(it is keras trained model)

H5 extension is used for trained model files

Test.py(python file) used to execute the project

In this project there are total 5 emotions:

Angry happy Neutral Sad Surprise

2nd project:

Emotion detection system

Matlab

5 emotions classes:

Anxiety disgust happiness and fair

60% to 70% accuracy achieved till now.

3rd project:

Emotion detection system

Pretrained kaggle model for emotions

Author of pretrained model jonathan oheix.

Multiple detection accuracy decreases with increase in more number of faces

70% accuracy achieved till now.

For using matplotlib, images from trained model are need to be sequentially saved.

Images are usually formed in grayscale format.

References

<https://www.youtube.com/watch?v=PulKlAZRoAY>

<https://www.youtube.com/watch?v=bYvNY8TqIO4>

<https://www.youtube.com/watch?v=Bb4Wvl57LIk>

<https://www.youtube.com/watch?v=fkgpvkqcoJc&t=80s>

<https://www.youtube.com/watch?v=avv9GQ3b6Qg>

<https://www.youtube.com/watch?v=0O0otPBtbXs>

<https://www.youtube.com/watch?v=ou-uhY4616A>

libraries:

matplotlib

numpy

pandas

cv2

keras(deep learning libraries)

seaborn

keras.layers(to import layers as in artificialneural networks)

keras.