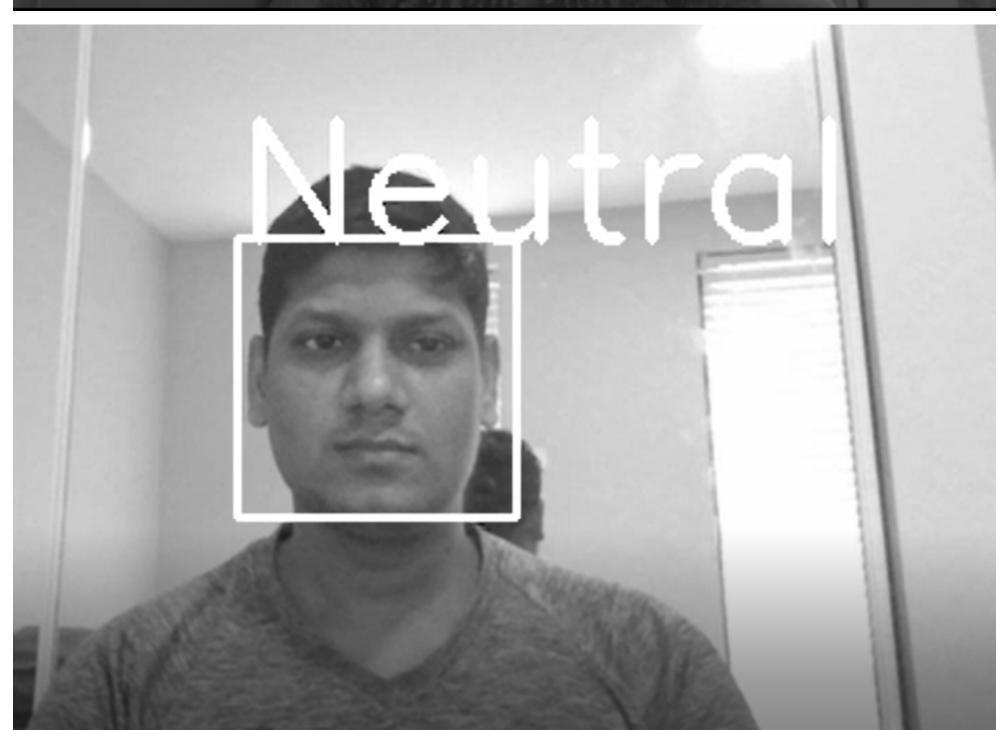
## **Emotion detection in easy steps**

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```
In [1]: from keras.models import load_model
from time import sleep
from keras.preprocessing.image import img_to_array
from keras.preprocessing import image
import cv2
import numpy as np

Using TensorFlow backend.
```

```
In [ ]: face_classifier = cv2.CascadeClassifier("data/haarcascades/haarcascade_frontalface_alt2.xml")
        classifier =load_model('Emotion_vgg.h5')
        class_labels =['Angry','Happy','Neutral','Sad','Surprize']
        cap = cv2.VideoCapture(0)
        while True:
            ret,frame =cap.read()
            labels = []
            gray = cv2.cvtColor(frame, cv2.COLOR_BGR2GRAY)
            faces = face_classifier.detectMultiScale(gray, scaleFactor = 1.5, minNeighbors=6)
            for (x,y,w,h) in faces:
                cv2.rectangle(gray,(x,y),(x+w,y+h),(255,0,0),2)
                roi_gray = gray[y:y+h,x:x+w]
                roi_color =frame[y:y+h,x:x+w]
                roi_gray = cv2.resize(roi_gray,(50,50),interpolation =cv2.INTER_AREA)
                img_item ="my_image.png"
                cv2.imwrite(img_item, roi_color)
            #rect, face, image =face_detector(frame)
                if np.sum([roi_gray])!=0:
                    roi =roi_gray.astype('float')/255.0
                    roi = img_to_array(roi)
                    roi =np.expand_dims(roi,axis =0)
                    # make a predicttion on ROI then look up the class
                    preds =classifier.predict(roi)[0]
                    label =class_labels[preds.argmax()]
                    label_position = (x,y)
                    cv2.putText(gray,label,label_position,cv2.FONT_HERSHEY_SIMPLEX,2,(255,0,0),3)
                    cv2.putText(frame, 'No Face Found', (20,60), cv2.FONT_HERSHEY_SIMPLEX, 2, (255,0,0), 3)
            cv2.imshow("Om Emotion Detector", gray)
            if cv2.waitKey(20) \& 0xFF == ord("q"):
        cap.release()
        cv2.destroyAllWindows()
```