

```
1 import cv2
2 import numpy as np
3
4 with open(r"C:\Users\rkssp\Desktop\TEF0logic PROJECTS
  \Human Activity Detection\action_recognition_kinetics
    .txt") as f:
5     classes = f.read().splitlines()
6
7 cap = cv2.VideoCapture(0)
8 duration = 15
9
10 model = cv2.dnn.readNet(r"C:\Users\rkssp\Desktop\
  TEF0logic PROJECTS\Human Activity Detection\resnet-
    34_kinetics.onnx")
11
12 while True:
13     images = []
14     for i in range(duration):
15         success, img = cap.read()
16         images.append(img)
17
18     blob = cv2.dnn.blobFromImages(images, 1.0, (112,
19 112), (114.7748, 107.7354, 99.4750), True, True)
20     blob = np.transpose(blob, (1, 0, 2, 3))
21     blob = np.expand_dims(blob, axis=0)
22
23     model.setInput(blob)
24     outputs = model.forward()
25     label = classes[np.argmax(outputs)]
26
27     # Display the label on the last frame
28     cv2.putText(images[-1], label, (10, 25), cv2.
29     FONT_HERSHEY_SIMPLEX, 0.8, (255, 255, 255), 2)
30     cv2.imshow('Image', images[-1])
31
32     if cv2.waitKey(1) & 0xff == ord('q'):
33         break
34
35 cap.release()
36 cv2.destroyAllWindows()
37
```