

```
1 import cv2
2 import mediapipe as mp
3
4
5 # Function to detect poses
6 def detect_pose(frame, pose_detector):
7     # Convert the image to RGB format
8     image_rgb = cv2.cvtColor(frame, cv2.COLOR_BGR2RGB
9 )
10
11     # Detect poses in the image
12     results = pose_detector.process(image_rgb)
13
14     # Draw pose landmarks on the image if poses are
15     # detected
16     if results.pose_landmarks:
17         mp.solutions.drawing_utils.draw_landmarks(
18             frame, results.pose_landmarks, mp.solutions.pose.
19             POSE_CONNECTIONS)
20
21
22 # Main function
23 def main():
24     # OpenCV video capture
25     cap = cv2.VideoCapture(0) # Use 0 for the
26     # default webcam
27
28     # Initialize Mediapipe Pose model
29     mp_pose = mp.solutions.pose
30     pose_detector = mp_pose.Pose()
31
32     while cap.isOpened():
33         # Read frame from webcam
34         success, frame = cap.read()
35         if not success:
36             break
37
38         # Detect pose in the frame
39         detect_pose(frame, pose_detector)
40
41         # Display the frame
```

```
37         cv2.imshow('Pose Detection', frame)
38
39         # Exit loop when 'q' key is pressed
40         if cv2.waitKey(1) & 0xFF == ord('q'):
41             break
42
43         # Release the VideoCapture and close all OpenCV
windows
44         cap.release()
45         cv2.destroyAllWindows()
46
47
48 if __name__ == '__main__':
49     main()
50
```