

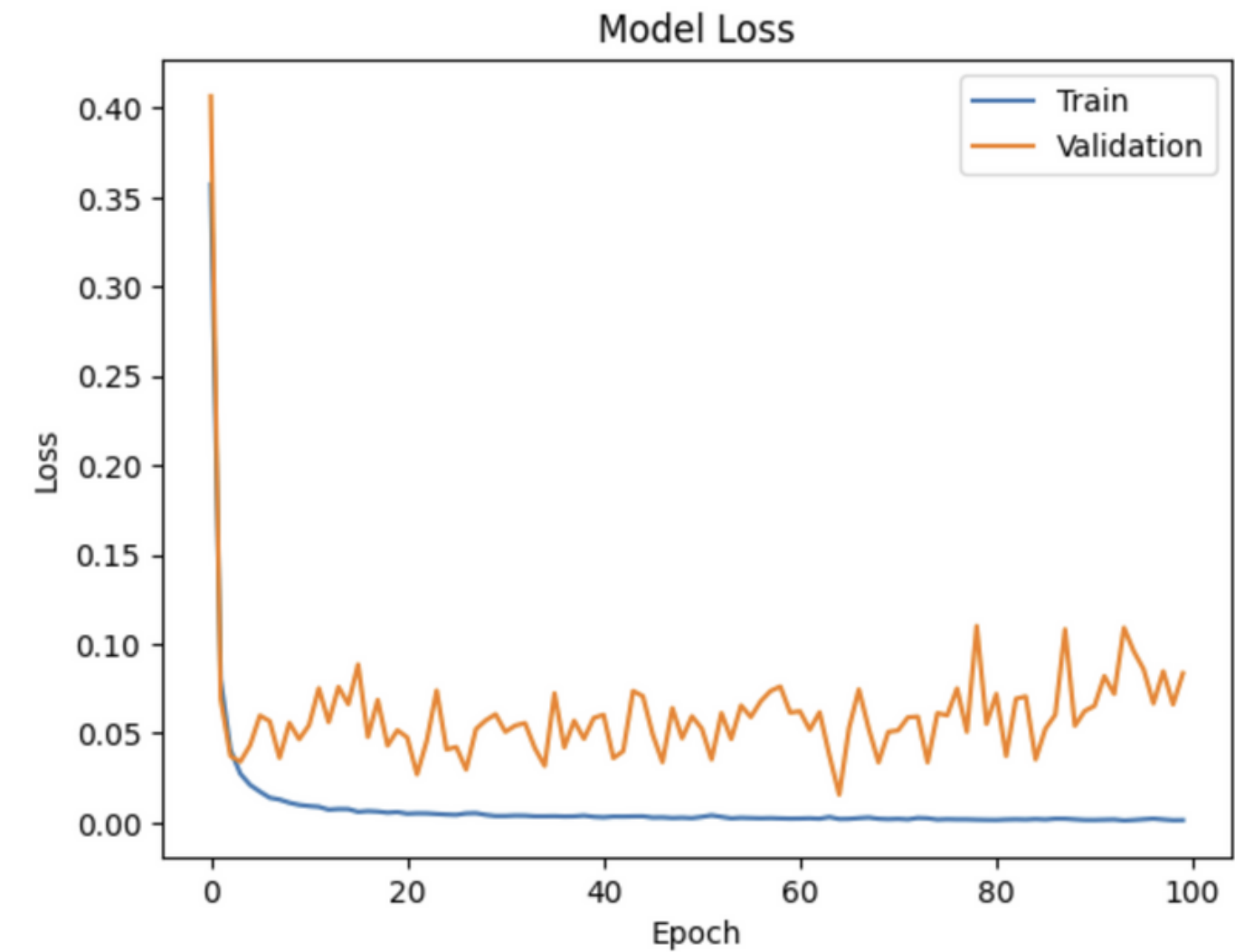
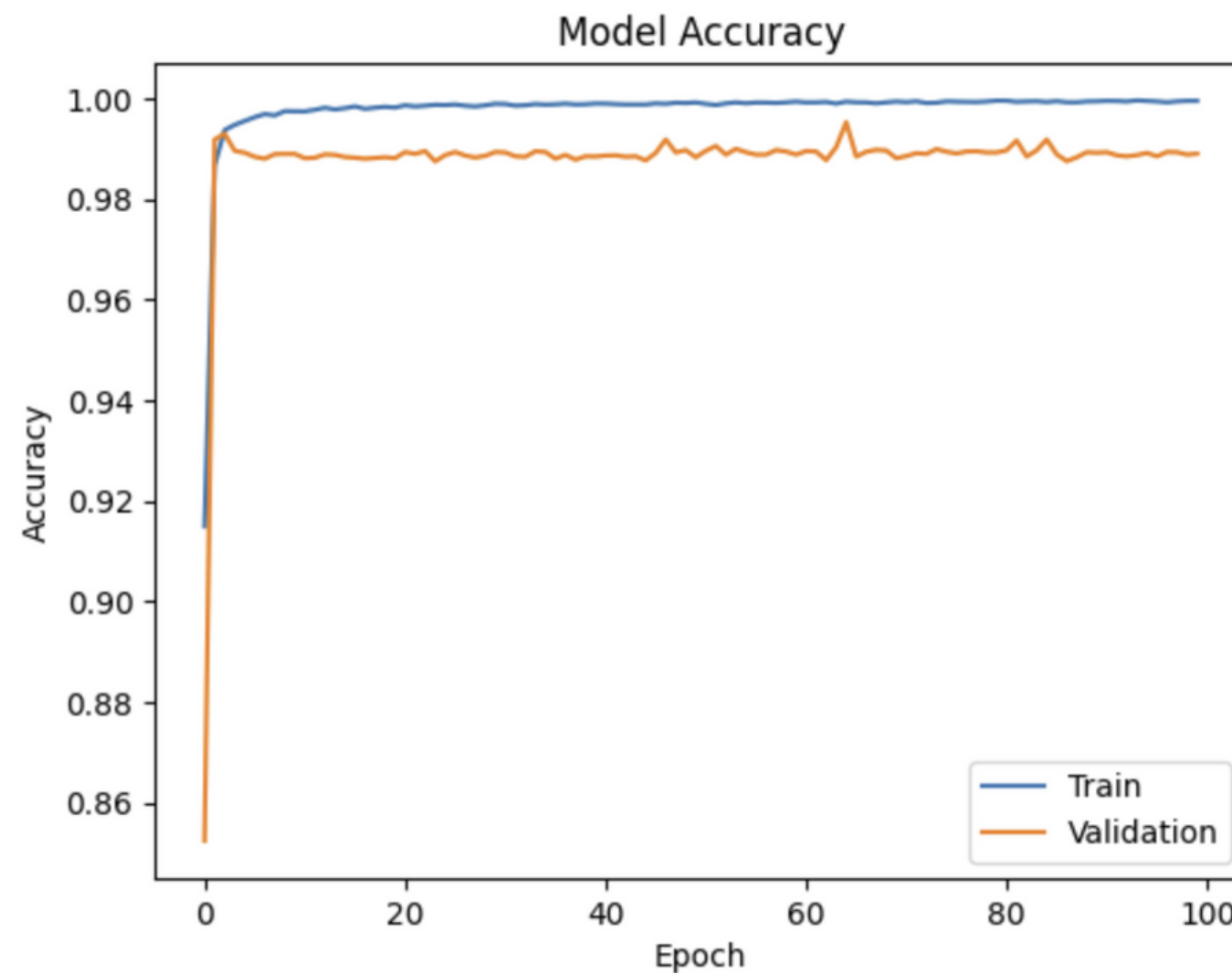
RESULTS



Pose Detection And Feedback Generation
For Different Yoga Asanas

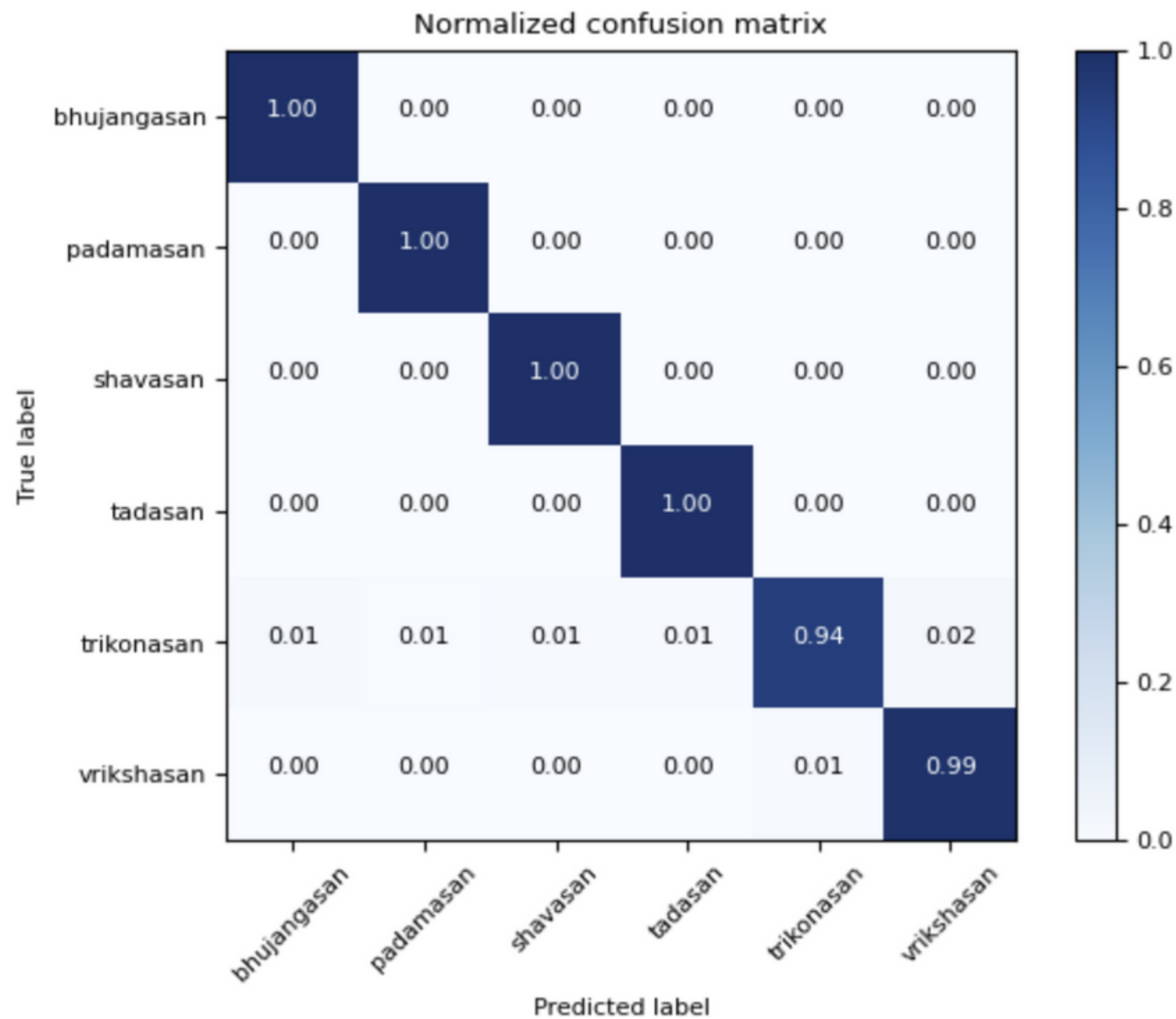
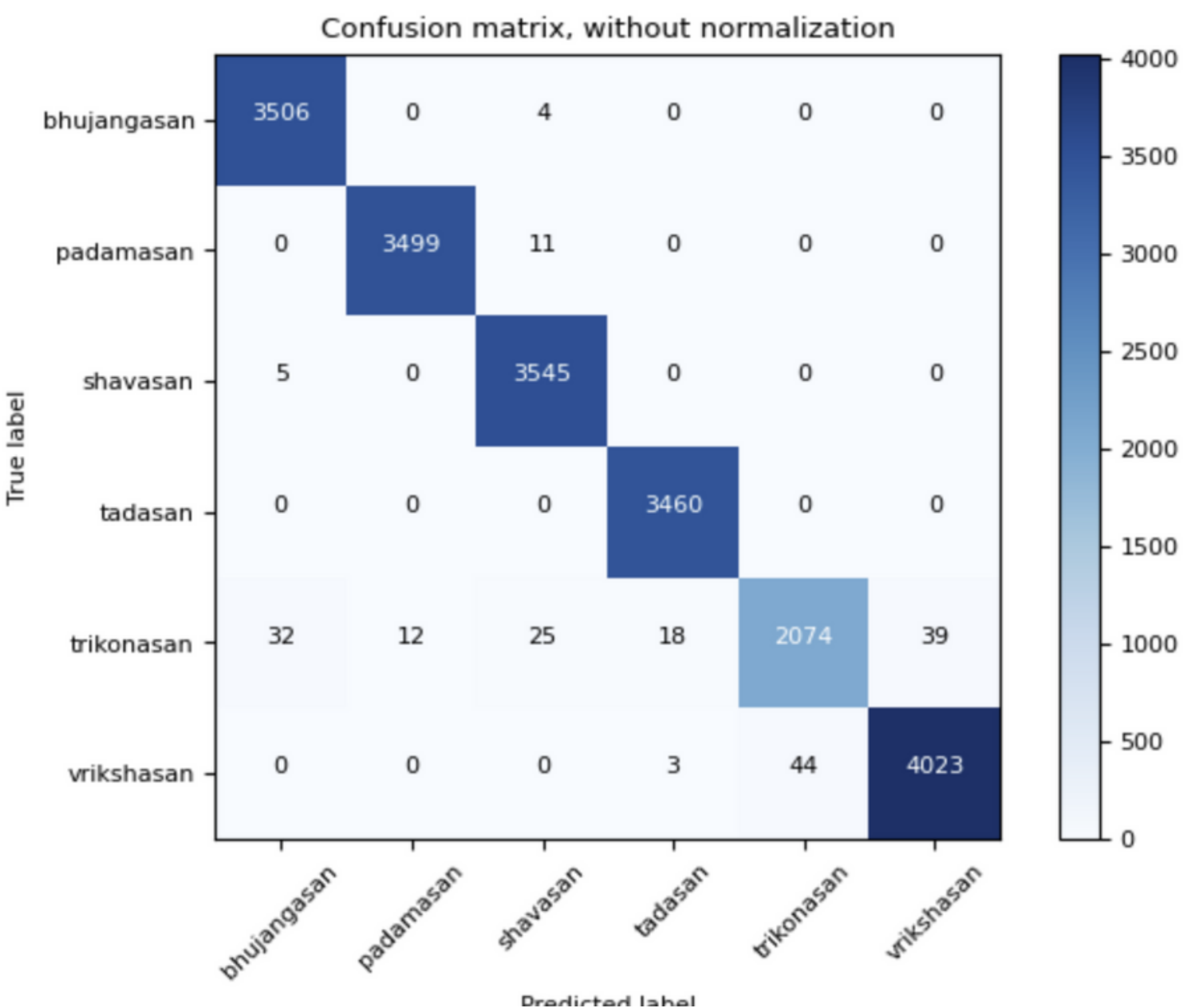


Training and Validation Accuracy



Achieved framewise accuracy of 99.05%. Employing polling techniques further improved accuracy to an impressive 99.66%.

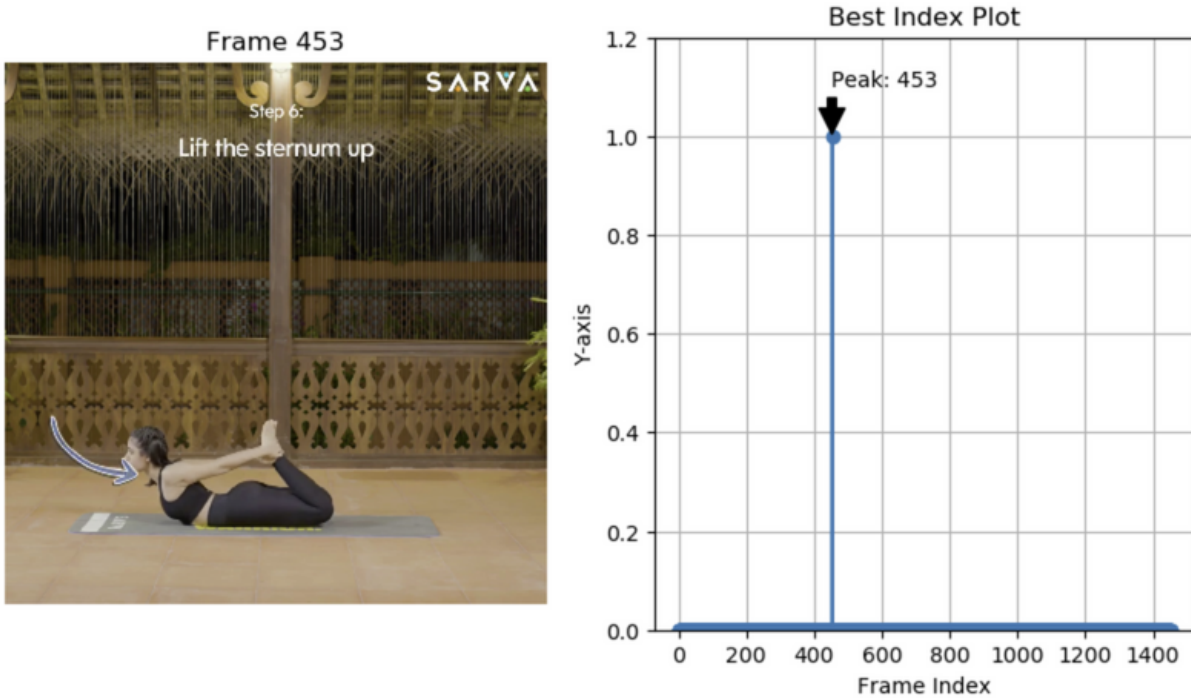
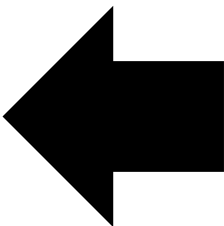
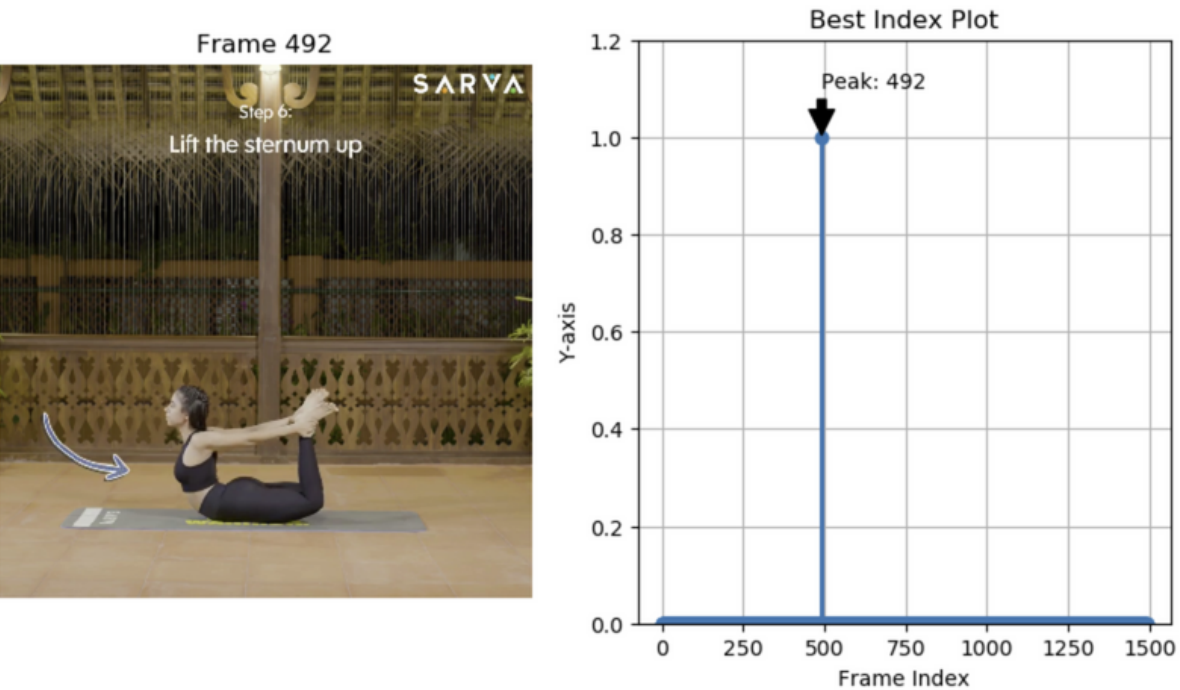
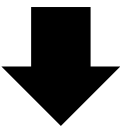
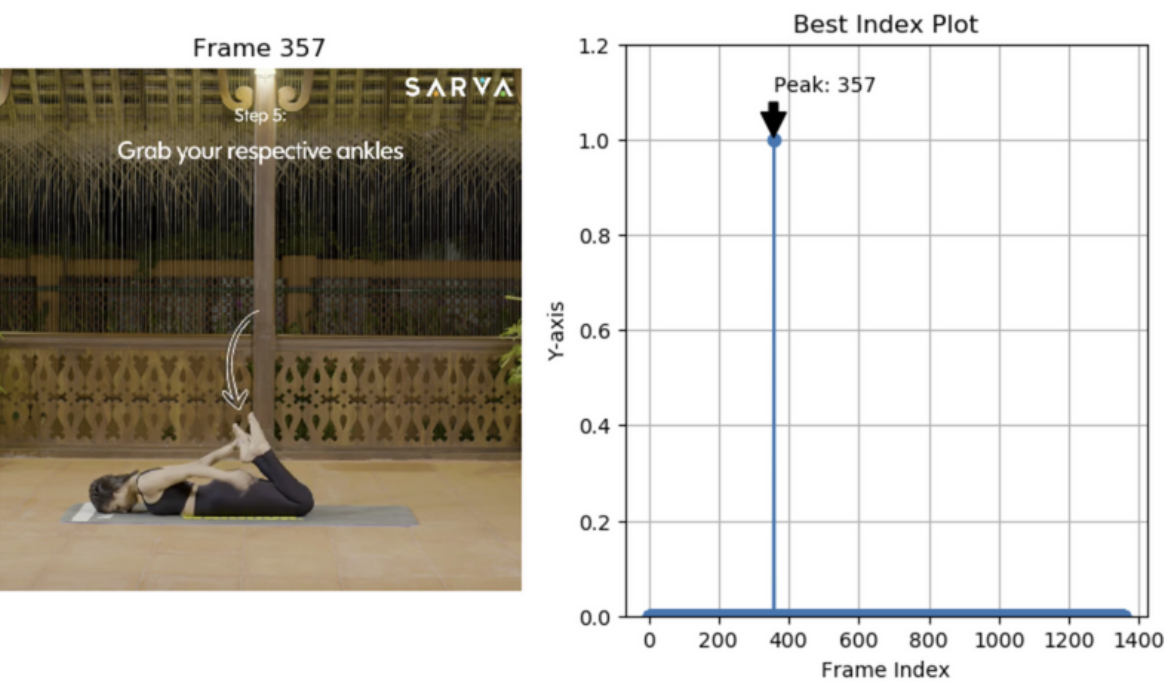
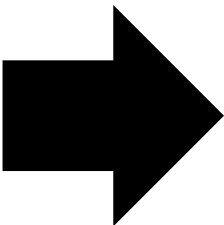
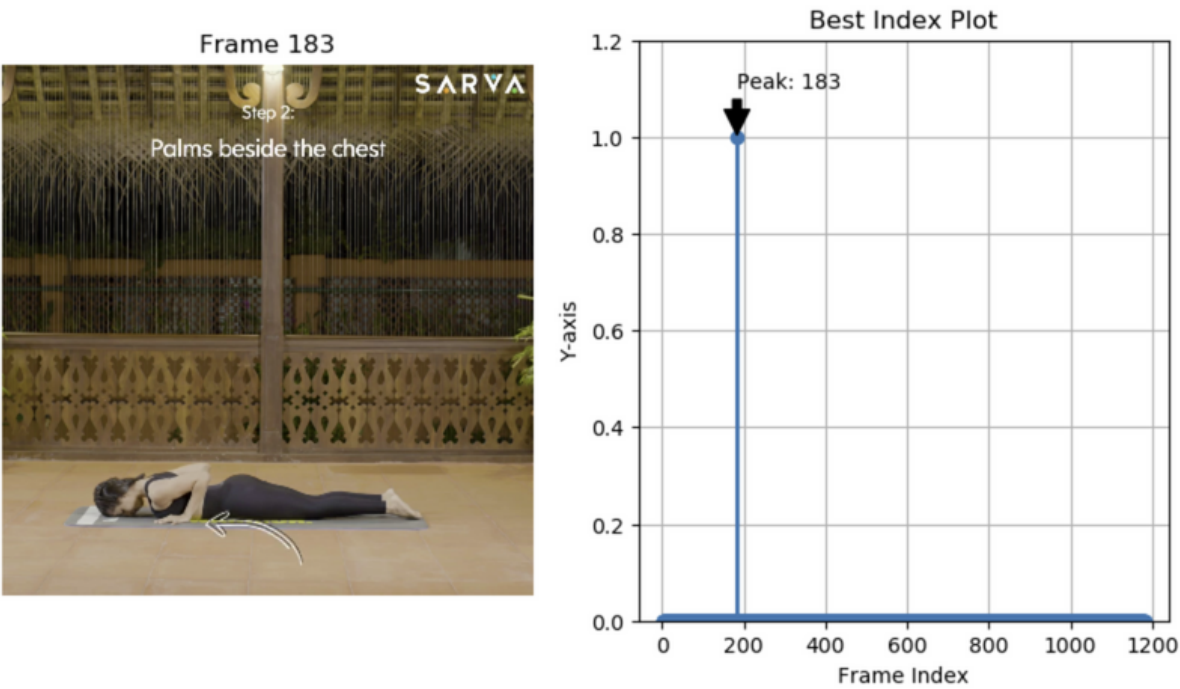
Confusion Matrix

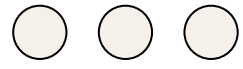


Classification of Yoga Asanas

```
19] if m==nof:
    | break
.. 1/1 [=====] - 0s 17ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 17ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 20ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 22ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 22ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 22ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 58ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 20ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 18ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 18ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 20ms/step
    Prediction is shavasan
    1/1 [=====] - 0s 17ms/step
    Prediction is shavasan
```

Demonstration of the Closest/Best frames on test video





Feedback Generation



[/home/nishitcd/001_Nishitcd/Feedback_generation/test_videos/Bhadradasana_json/test](#)

Frame 3

Feedback for Frame 3 :

left_shoulder - incorrect angle. Rotate 24 degrees for left_shoulder.

right_shoulder - incorrect angle. Rotate 22 degrees for right_shoulder.

left_elbow - incorrect angle. Rotate 109 degrees for left_elbow.

right_elbow - incorrect angle. Rotate 112 degrees for right_elbow.

left_hip - incorrect angle. Rotate 7 degrees for left_hip.

right_hip - correct angle

left_knee - correct angle

right_knee - incorrect angle. Rotate 4 degrees for right_knee.

Frame 6

Feedback for Frame 6 :

...

right_knee - incorrect angle. Rotate 25 degrees for right_knee.

Thank You!

