

Chapter 5

User Guide

5.1 Kinect powering and Connection

The Kinect should be powered with a 12V (also 1000mA) source. Then its output USB connector should be attached to a computer having the “PSL translator” in it. Please make sure that LED near to the USB connector is on.

5.2 Positioning:

Kinect device-depth image module works in a predefined range of 3.4ft to 10ft approximately. The signer should be in the optimum range of the Kinect device. Any object outside this range is either goes undetected or is attributes as background.

5.3 Elevation angle

Elevation angle of the Kinect should preferably be in the range from 15 o to 25o. Can be adjusted physically or from the Kinect studio 1.8.

5.4 Run the code

Run the code and for the interface window to appear.

5.5 Interface Description

There are three blocks on the interface. The left block displays the depth stream (transformed to gray image) from the Kinect. The upper right block displays the segmented

and skeletonized frame against the frame in the left block at the same time. And lastly, the lower right block contains four item:

- Text/Label window: Displays the output label against the sign perform in front of the Kinect.
- Start button: Allows user to start performing (recording) the sign.
- End button: Allows the user to stop performing the sign.
- Predict button: Once the sign is performed and saved using the 'end' button. User can predict this sign to sentence label using the 'predict' button.
-

An interface depiction is given below in which a sign is being performed.



Figure 5.1: User Guide step NO. 1

5.6 Sign label

When you press the 'predict' button, the label or sentence against the sign is displayed in the Text/Label box as predicted by the model. As depicted by the following image.

5.7 After predicting a sign

After the prediction of a sign, user does not need to close the interface window. After the predict button is pressed, You again can press the 'start' button to record next sign and

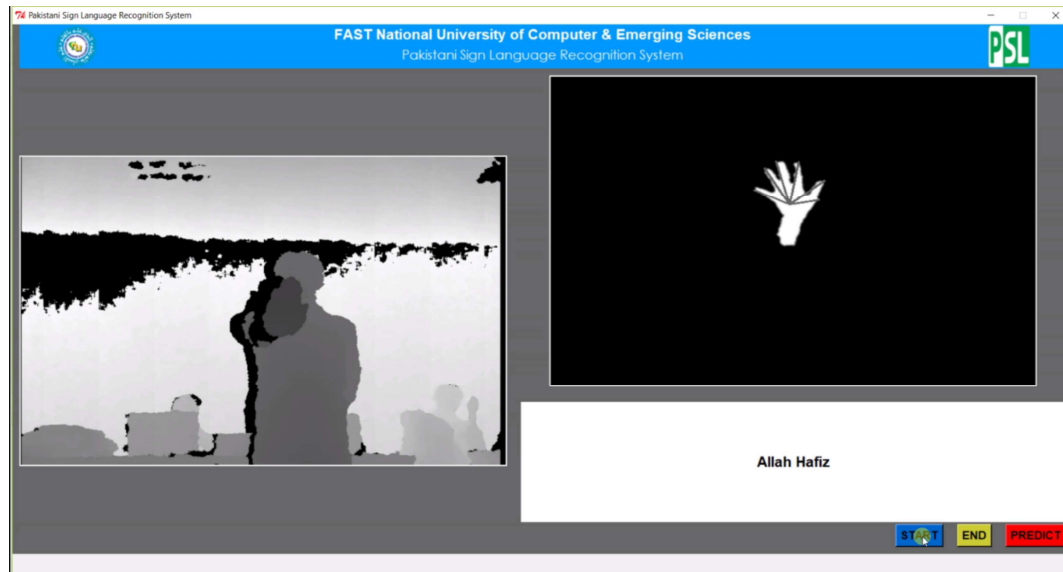


Figure 5.2: User Guide step NO. 1

can again successfully stop recording using 'end' button. Now again press the 'predict' button to predict the label against the sign.

5.8 Re-attempt the sign

What if a sign goes wrong? You don't need to predict the sign and then again start recording it. Just simply press the 'start' button again to re-record the sign.

