

Abstract

To fulfill a communication gap among deafened and dumb communal, general public sign language recognition is a significant milestone, so we come with sign language translator that convert given gestures into textual form (alphabets and digits). It makes speech recognition of textual form and enable the user to listen about the gestures they passed. We collect the dataset of 44 gestures that include alphabets and digits. We have anticipated a way of Intelligent hand gesture recognition system empowered with CNN. We start by preprocessing of input image provided then we make use of threshold to eliminate noise from image and smoothen the photo. Region filling is applied to fill holes in the object of interest. The training of data collected is done through CNN keras model using TensorFlow as a backend. After training data is classified. Testing of data is done using keras model. After testing is accomplished gesture recognition took place as user pass the gesture and window display a textual form of given gesture as well as convert it into speech form.