Abstract

The most important aspect of a society is communication. Every culture in the world has their own way of communicating with people of their kind. But the people who cannot hear or speak cannot easily share their thoughts. This creates a sort of isolation for people like them. The hand gestures that people of special abilities make to communicate would be taken up from a camera and the same would be translated and show on the screen along with an audible source. The most basic methods one has to follow in most of the sign language detection system are tracking, edge detection, segmentation, and a dataset. The first and foremost part is the recognition of hand or motion tracking of the hand from the camera. After the hand is successfully detected the extra environment must be diminished. The removal of an extra environment is done with the help of edge detection and segmentation through various image processing algorithms. After the distinguished picture is obtained, with the help of machine learning techniques and neural networks the result obtained are compared to the existing normalized dataset which is then translated over and produced as an output.
References


7. Deepali Naglot and Milind Kulkarni, “Real-Time Sign Language Recognition using the Leap Motion Controller”.


Distinctive Feature Extraction”.

16. Marlon Oliveira, Houssem Chatbri, Suzanne Little, Noel E. O’Connor, and Alistair Sutherland, “A comparison between end-to-end approaches and feature extraction based approaches for Sign Language recognition”.


Index Terms

Computer Science          Pattern Recognition

Keywords

Preprocessing, Edge detection, ANN, CNN, LDA, Skin detection, YCbCr