ABSTRACT

In order to communicate with individuals who are primarily dumb and deaf, we use sign language, which uses hand gestures and movements. In order to process the image and identify the hand gestures, this paper suggests a system that uses a Deep Learning algorithm called a Convolution Neural Network (CNN). The 26 alphabets and 0–9 digit hand movements of Sign Language are demonstrated in this paper's sign language recognition section. Pre-processing, feature extraction, model training and testing, and sign to text conversion are just a few of the components included in the suggested system. With our dataset, various CNN architectures and pre-processing methods, including skin masking, thresholding, greyscale, and Canny edge detection, were created and evaluated to improve recognition accuracy.