Deep Learning Based Sign Language Recognition for English and Marathi Language

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Abstract: *In our daily life language play an important role to communicate with each other. To express the feeling and emotions we use languages. The voice of human has different attribute such as speed, vocal, pitch, resonance, rhythm, tone, etc. which is helpful to express the feeling of human. But the people who are dumb and deaf they are unable to communicate with normal people due to language barrier. Deaf and dumb people use sign language to express their thought. Generally normal people not understand the sign language.Sign language is the only tool of communication for the person who is not able to speak and hear anything. Sign language is a boon for the physically challenged people to express their thoughts and emotion. In this work, a novel scheme of sign language recognition has been proposed for identifying the alphabets and gestures in sign language. With the help of computer vision and neural networks we can detect the signs and give the respective text output.*

Keywords: Sign Language Recognition, Convolution Neural Network, LR, Image Processing, Hand Gesture Recognition, text and voice output

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