

## Paper-1

# Static Sign Language Recognition using Deep Learning

Communication is essential in building a nation & Good communication leads to better understanding. It is important for all including the dumb & deaf. Therefore, this paper exhibits a system that will recognize static sign gestures and convert them into corresponding words. A vision-based approach using a web-cam is introduced to obtain from the data from the signer and can be used. This system is based on a skin-colour modelling technique, that is explicit skin color space thresholding. The skin-color range is predetermined that will extract pixels (hand) from non-pixels (background). The images were fed into the model called CNN for classification of images. Keras was used for training of images. Provided with proper lighting conditions and a uniform background, the system

acquired an average testing accuracy of 93.67%  
~~gesture signs~~ . This approach is used for  
fast computation and is done in Realtime

Since the main objective of ~~the~~ <sup>our</sup> project  
is to develop a system that can translate  
sign language in to its corresponding word  
equivalent that includes letters, numbers &  
basic sign language gestures, by going  
through this literature paper we were able  
to understand more.