

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,**

**BELAGAVI-590018**



**A PROJECT REPORT ON**

**“SIGN TO TEXT CONVERSION”**

Submitted in partial fulfillment for the award of Degree of

**BACHELOR OF ENGINEERING**

**IN**

**COMPUTER SCIENCE & ENGINEERING**

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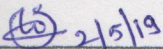
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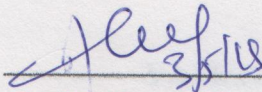
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 21/5/19

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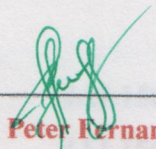
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# ABSTRACT

Generally deaf and dumb people use sign language for communication but they find difficulty in communicating with others who don't understand sign language. Sign language is an expressive and natural way for communication between normal and dumb people. So, we need a translator to understand what they speak and communicate with us. The sign language translation system translates the normal sign language to speech and hence makes the communication between normal person and dumb people easier. With a rising demand in disability solutions, sign language recognition has become an important research problem in the field of computer vision. Current sign language detection systems, however, lack the basic characteristics like accessibility and affordability which is necessary for people with speech disability to interact with everyday environment.

The proposed system focuses on providing a solution for understanding sign languages. The steps involved in developing this application are capturing hand gesture as input and perform masking operation on the captured image. Masking is performed by recalculate each pixels value in an image according to a mask matrix. It is a non-destructive process of image editing. Once image masking process is done then we perform image classification using Tensorflow. Image classification in machine learning is when you have a photo, and the machine learning model will be able to tell what subject is in the photo. Comparison of the captured image is done with the dataset masked images, if the image get matched then it display the character and the accuracy, if image doesn't match it shows accuracy with the some other character.

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