

## ABSTRACT

According to the World federation of the deaf, There are more than 70 million deaf people worldwide. That's 5% of the world's population. Sign language plays a great role for deaf people to communicate with normal people, but it is too difficult to convey their message to normal people. Since normal people are not trained with sign language. This leads to isolation of deaf people, hence the solution to this problem is to convert the human voice to hand sign language. Our purpose is to develop an interactive application software using Machine Learning algorithm for automatic translation of speech into sign language. This language translator should be able to translate the English language audio input to sign language display output. By this way the difference between the normal people and deaf community can be minimized.