

# Speech to Indian Sign Language Translator

Mr. Deepak Bhagat<sup>1</sup>, Mr. Hitesh Bharambe<sup>2</sup>, Mr. Jashpal Joshi<sup>3</sup>, Prof. Shahe Gul<sup>4</sup>

Students, Department of Computer Engineering<sup>1,2,3</sup>

Guide, Department of Computer Engineering<sup>4</sup>

Theem College of Engineering, Boisar (E), Mumbai, Maharashtra, India

**Abstract:** *Communication plays a critical role for people and is regarded as a skill in life. Having this important aspect of life and surroundings in mind, we present our project article, which focuses primarily on supporting patients with pain or silent speech. Our research work leads to improved contact with the deaf and the mute. Each sign language uses sign patterns visually conveyed to express the true meaning. The combination of hand gestures and/or motions of arm and body is called Sign Language and the Dictionary. It is the combination of hands and facial expressions. Our program project is able to understand signals in sign language. These symbols may be used to interact with hearing aids. Our article suggests a program that allows common people to interact effectively with others that are hard to understand. In this case, we are implementing the Indian Sign Language (ISL) method by using a microphone and a camera. Translation of the voice into Indian sign language system by the ISL translation system is possible. The ISL translation framework uses a microphone to get pictures (from ordinary people) or continuous video clips, which the application interprets. Deaf people always miss out the fun that a normal person does, may it be communication, playing computer games, attending seminars or video conferences, etc. Communication is the most important difficulty they face with normal people and also every normal person does not know the sign language. The aim of our project is to develop a communication system for the deaf people. It converts the audio message into the sign language. This system takes audio as input, converts this audio recording message into text and displays the relevant Indian Sign Language images or GIFs which are predefined. By using this system, the communication between normal and deaf people gets easier.*

**Keywords:** Indian Sign Language Translator.

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