REAL-TIME COMMUNICATION SYSTEM POWERED BY AI FOR SPECIALLY-ABLED

Problem Statement

Need for real-time communication system for Specially-abled:

There are handicapped people in our society. Although technology is constantly evolving, little is being done to improve the lives of these people. It has always been difficult to communicate with someone who is deaf-mute. It is quite challenging for silent persons to communicate with non-mute people. because hand sign language is not taught to the general public. It might be quite challenging for them to communicate at times of crisis. In circumstances where other modes of communication, like speech, are not possible, the human hand has remained a common alternative for information transmission.

Our Plan:

The project intends to create a system that can translate speech into understandable sign language for the deaf and dumb as well as translate sign language into a human hearing voice in the desired language to communicate a message to normal people.

Abstract:

A convolution neural network is being used to build a model that is trained on various hand motions. On the basis of this model, an app is created. With the help of this app, persons who are deaf or dumb can communicate using signs that are translated into speech and human-understandable words. To have a proper communication between a normal person and a handicapped person in any language, a voice conversion system with hand gesture recognition and translation will be very helpful.