

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

Team ID	PNT2022TMID26213
Project Name	Real-Time Communication Powered By AI For Specially Abled

PROBLEM STATEMENT:

Communication should be universal without any barriers or limitations. Communication between a deaf-mute and a normal person has always been a challenging task. It is very difficult for mute people to convey their message to normal people. Since normal people are not trained on hand sign language. In emergency times conveying their message is very difficult. The human hand has remained a popular choice to convey information in situations where other forms like speech cannot be used. To facilitate easier communication for specially-abled (Deaf and Dumb) people with normal people by developing a model that incorporates necessary features including sign language interpretation and classification. The project aims to develop a system that converts sign language into a human-hearing voice in the desired language as well as to convert speech into understandable sign language for the deaf and dumb. A convolution neural network is used to create a model that will be trained on different hand gestures. A web application to use the model will be built. This application will enable the deaf and dumb people to convey their information using signs which get converted to human-understandable language and speech is given as output.