In deaf and dumb having conversion is only half duplex communication

conversion from hand gestures is available not only in text but also with voice providing more convenience to normal person.

The first part is for Deaf &
Dumb person to convey their
messages to a normal person
by using our hardware
system and the second one
is for a normal person who
can also respond them easily
without learning a sign
language by using our
Android Application

The system consists of a gesture recognizer hand-glove which converts gestures into electrical signals using flex sensors.

These electrical signals are then processed using an Arduino

microcontroller and a Pythonbased backend for text-tospeech conversion a Microsoft
program
committed to
empowering
people living
with disabilities.

We are making use of a convolution neural network to create a model that is trained on different hand gestures. An app is built which uses this model. This app enables deaf and dumb people to convey their information using signs which get converted to human-understandable language and speech is given as output.

Says
Thinks

Does
Feels

Refer websites

Making use of Al

attach to any
wheelchair or
bedside, track eye
movement and use
ML to assist smart
prediction of the
user's needs and
wants.

hand gesture
language (sign
language) to
communicate
with each other

Discuss with teammates

develop solutions to many physical and cognitive challenges disabled individuals face at work and in daily life to promote social inclusion for them.