

# **REAL TIME COMMUNICATION SYSTEM POWERED BY AI FOR SPECIALLY ABLED**

**Domain name:** Artificial Intelligence

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## **ABSTRACT:**

The communication and technologies associated with it is developing day by day. Especially, In the domain of Artificial Intelligence-healthcare systems, communication between specially abled and normal persons is becoming popular day by day. Differently abled peoples require better forms of communication with the help of new technologies so that they can significantly improve their ability to get around and participate in daily activities. Since normal people are not trained, it is very difficult for them to understand their needs. Hence, normal people need special mechanisms to communicate with the differently abled and thus understand their needs and concerns and to have a proper communication medium.

The project focuses on developing a system which converts the sign language into a human hearing voice in the desired language to convey a message to normal people, as well as convert speech into understandable sign language for the deaf and dumb. For this, we use 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 disabled people to convey their information using signs which get converted to human-understandable language and speech is given as output.

# **LITERATURE SURVEY:**

## **1.D-Talk: Sign Language Recognition System for People with Disability using Machine Learning and Image Processing**

Communication plays a significant role in making the world a better place. Most people communicate efficiently without any issues, but many cannot due to disability. They cannot hear or speak, which makes Earth a problematic place to live for them. Even simple basic tasks become difficult for them. Disability is an emotive human condition. It limits the individual to a certain level of performance. Being deaf and dumb pushes the subject to oblivion, highly introverted. In a tech era, no one should be limited due to his or her inability. This paper shows how artificial intelligence is being used to help people who are unable to do what most people do in their everyday lives. Aligned with communication, D-talk is a system that allows people who are unable to talk and hear be fully understood and for them to learn their language easier and also for the people that would interact and communicate with them. This system provides detailed hand gestures that show the interpretation at the bottom so that everyone can understand them. This research allows the readers to learn the system and what it can do to people who are struggling with what they are not capable of and will provide the technical terms on how the system works.

## REFERENCES:

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