

Naalaiya Thiran – Real-Time Communication System Powered by AI for Specially Abled

Problem Statement :

- Dumb people are usually face some problems on normal communication with other people in society. To overcome these problems, we have proposed a system that uses cameras to capture and convert videos of hand gestures from dumb people who turn into speech for understanding normal people.
- The primary application for addressing the sign language is the improvement of the sign language. Computer recognition of the sign language is an important research problem for communication with the hearing impaired.
- The system proposed to develop and build an intelligent system that uses image processing, machine learning and artificial intelligence concepts to make visual inputs of hand gestures of sign language and to create an easily recognizable form of outputs.

Product Function :

- It's a Desktop application.
- User will start video from camera.
- User will be able to register different signs for further recognition using camera.
- When user will start recognition activity and give various hand gestures in front of camera, sign will be detected and speech will be produced to announce detected sign.

Conclusion :

- The proposed communication system between Deaf and Dumb people and ordinary people are aiming for it when bridging the communication gap between two societies.