

Hand glove for Deaf & Dumb People

Introduction :

Deaf and Dumb people use sign language as their means of communication. Sign language is nothing but signs made with hands and other movements, facial expressions, different body postures used by deaf people. Deaf and dumb people are independent of surrounding spoken language so to convey their actions and message they use this language. It involves manual and non-manual signals. Manual signal involves fingers, hands and arms while in non-manual signal involves face, head, body, eyes. Sign language is natural language although it is independent of spoken language. It is well-structured language involving phonology, syntax, grammar and morphology. It is not universal language for all deaf people across the world it differs from region to region.

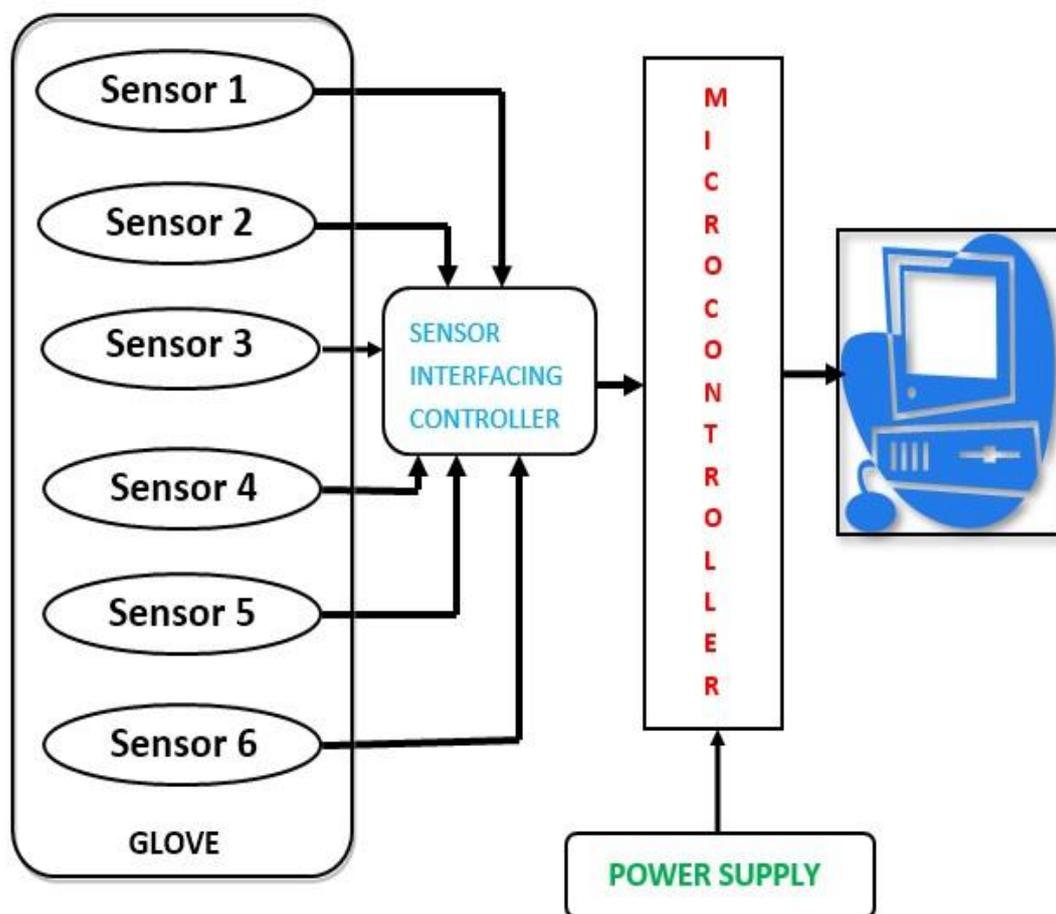
The aim of the sign language recognition system is better understanding of hand gesture and easily learn the sign language of deaf and dumb people. We are trying to make a System which will translate action into image form. It helps in teaching for deaf and dumb people. When new deaf and dumb people try to learn sign language that time they may face many difficulties but using this system it will be more easy and interactive way to learn. We try to help them to learn sign language easily and understand as quick as possible. The human nature is very interesting because when we saw any image we capture it and understand easily.

Hand gesture is most frequently used method in sign language. They use hand gesture most commonly to

communicate among themselves or with normal people. This project represents a system which is able to recognise and translate sign language automatically to help teacher for teaching effectively to deaf and dumb people. This project aims to reduce teaching barrier between teacher and deaf people and helps to teaching smoothly.

To solve this problem, we used to make electronic device which translate sign language into image. After seen lot of difficulties face by deaf and dumb people in their day to day life, we decided to make this kind of system for ease in communication.

Block Diagram :



Advantage :

1. It is a social cause project.
2. Deaf people can easily communicate with normal people.
3. Easy to implement, Compact systems and Low cost.
4. Easy to access the system.
5. Easy to make change of sensor windows according to wearing hand.
6. Gloves can be used for any hand gestures.
7. Hand Gloves can be utilized in even dull condition.
8. All signs can be utilized using single hand.
9. It gives the fastest Response.

Limitation :

1. This Project is Non versatile.
2. It cannot give the full meaning of conversation.

Application :

1. Gesture recognition and conversion.
2. As a translating device for Mute people.
3. Translation of sign language in many regional languages.
4. It would be useful to develop a system with recognizing different signs.