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| **S.No** | **Journal and Authors** | **Title** | **Methodology** | **Pros** | **Cons** | **Inference** |
| 1 | International Journal of Advanced Trends in Computer Science and EngineeringAuthors- Bayan Mohammed Saleh,-Reem Ibrahim Al Beshr's -Muhammad Usman Tariq | D-Talk: Sign Language Recognition System for People with  Disability  using Machine  Learning and Image Processing -2020 | -Multilayer Network  -Neural network | This paper  focuses on the classification methods used in the prior  recognition scheme for sign Recognition. | The  system is very sensitive. It catches any element in the box. So,  the user must be careful to have a blank background | Gesture interpretation works best in case users  who understand sign language may interact with people who  are unfamiliar with sign language |
| 2 | International Journal of Innovative Research in Science, Engineering and Technology  **Authors**  -Kedar Potdar  -Gauri Nagavkar | Real-time Communication System for the Deaf and Dumb – 2017 | -Flex sensors  -Arduino | These electrical signals are then processed using an Arduino microcontroller and a Python-based backend for text-to-speech conversion | TTS functionality can be eliminated by adding a portable computer like the Raspberry Pi | The function of this unit is to read the gesture and fetch the corresponding letter. A voltage divider circuit is used between the Arduino Uno board and the sensors. |
| 3 | American-Eurasian Network for Scientific Information  **Authors**   -D.Narashiman  -T.Mala | Sign gesture representation using and-or tree -2015 | -Sign gesture rendering  - Dynamic sign generation | The advantage of the proposed method over the earlier method is that the location of the hand position is clearly mentioned. | unavailability of good sign language tutor, lack of importance to that community | If any new phonemes is to insert it can be done in constant time as they will directly attached to the leaf or external node |
| 4 | International Journal of Engineering Research & Technology (IJERT)  **Authors**  -Deepa S  -R Vaneeta  -M Sangeetha  -V Mamatha A | Hand Sign Communication System for Hearing Imparied -2015 | -HandSimulation  -Java3D  -3D graphics | simultaneously combining handshapes, orientation and movements of the hands , facial expressions, arms or body, and to fluidly express a speaker's thoughts | low the database of the preconfigured handshapes to enable signing of more words and ideas too. | The proposed method provides the means by which children at schools will be benefited by using it as an educational too |
| 5 | Intelligent Technologies for Communication, Learning and Teaching  **Authors**  -Lau Bee Theng | Assistive and Augmentive Communication for the Disabled -2014 | -Viola  -Jones Face    -DetectionAlgorithm | an enhanced interpersonal-human interaction for people with special needs, especially those with physical and communication disabilities | This would be another domain for further research on how a machine could distinguish different emotional state but reflected with the same facial expression | In facial expression recognition system, we employed Viola-Jones face detection algorithm which is commonly used by researchers to detect the subject face |