

# LITERATURE SURVEY

**Team No** :02

**Team ID** :B10-4A6E

**College Name** :Er. Perumal Manimekalai College of Engineering

**Department** :Computer Science and Engineering

---

**Team Leader** :Krithiksha.G

**Team Member** :Subhasri.M

**Team Member** :Nivetha.N

**Team Member** :Monika.Y

**Team Member** :Sembaruthi.N

S.No	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
1	Artificial Intelligence enabled virtual sixth sense application for the disabled	The sixth sense is a multi-platform app for aiding the people in need that is people who are handicapped in the form of lack of speech (dumb), lack of hearing (deaf), lack of sight (blind).	<ul style="list-style-type: none"> <li>• ML OCR kit</li> <li>• Firebase ML toolkit</li> <li>• Google Web toolkit TTS</li> </ul>	<ul style="list-style-type: none"> <li>• Android smartphones</li> <li>• object Detection</li> <li>• Text Recognition</li> <li>• API</li> </ul>	Help dumb people to easily and quickly communicate with normal people./The application still does depend on the camera picture quality for object detection
2	Design of a Communication System using Sign Language aid for Differently Abled Peoples.	Our goal is to design a human computer interface system that can accurately identify the language of the deaf and dumb.	<ul style="list-style-type: none"> <li>• Feature Extraction</li> <li>• Sign to text and Speech conversion.</li> <li>• Image preprocessing and segmentation.</li> </ul>	<ul style="list-style-type: none"> <li>• Blob Detection</li> <li>• Skin color recognition</li> <li>• Template Matching</li> </ul>	Hand gestures of deaf peoples by normal peoples this system is proposed and it gives output in the form of sound./A mediator is required to know the sign language.

S.NO	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
3	D-Talk: Sign Language Recognition System for People with Disability using Machine Learning and Image Processing	D-talk is a system that allows people who are unable to talk and hear and for them to learn their language easier and also for the people that would interact with them.	<ul style="list-style-type: none"> <li>Image Recognition process</li> <li>Object Detection</li> <li>Gesture Recognition</li> <li>HSV Algorithm.</li> </ul>	<ul style="list-style-type: none"> <li>Machine learning</li> <li>Deep learning</li> <li>Decision tree</li> </ul>	Speech interpretation is helpful for sign language nonspeakers who want the hand sign to understood./ The type of inaccuracy can emerge from user's, such as poor web camera
4	Real-time Communication System for the Deaf and Dumb	Aims to aid the deaf-mute by creation of a new system that helps convert sign language to text and speech for easier communication with audience.	<ul style="list-style-type: none"> <li>Flex sensor</li> <li>Arduino Uno</li> <li>Arduino IDE</li> </ul>	<ul style="list-style-type: none"> <li>Python Programming Language</li> <li>Gesture recognition</li> </ul>	The system forms the base infrastructure for a complete communicational aid system for the deaf and mute./it requires logical mechanism for classification of letters based on sensor values.

S.No	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
5	AN ANDROID APPLICATION TO AID UNEDUCATED DEAF DUMB PEOPLE	In this paper, we introduce an integrated android application to blend uneducated Deaf-Dumb people within society, and help them to communicate with normal people.	<ul style="list-style-type: none"> <li>• Sign language keyboard app</li> </ul>	<ul style="list-style-type: none"> <li>• Eclipse</li> <li>• SQL Lite</li> <li>• Java</li> </ul>	Offer a great tool for parents to teach their deaf and dumb kids And Introduce Sign language keyboard./this application introduces an easy translator from sign language to English or Arabic language.
6	A Sign Language Recognition for The Deaf and Dumb	it is a software which presents a system prototype that is able to automatically recognize sign language to help deaf and dumb people to communicate more effectively with each other or normal people.	<ul style="list-style-type: none"> <li>• Gesture classification</li> <li>• CNN model</li> <li>• Hand gesture</li> <li>• ANN</li> </ul>	<ul style="list-style-type: none"> <li>• OpenCV</li> <li>• feature extraction</li> </ul>	A functional real time vision based American sign language recognition for Deaf and Dumb people have been developed with accuracy of 92%. /We couldn't find any existing dataset.

**THANK YOU**