

LITERATURE SURVEY

REAL-TIME COMMUNICATION SYSTEM POWERED BY AI FOR ESPECIALLY ABLED

SUBMITTED BY

R.Richard
(310819205064)

H.RahulFernandez
(710419104008)

S.Srinivasan
(310819205086)

S.Indirakumar
(310819205038)

S.NO	TITLE	AUTHORS	ABSTRACT	DEMERITS	IDEAS
1.	SOFTWARE ASSISTANCE TO DEAF AND DUMB USING HANDSHAPE ALGORITHM	V. Purushotham Vijay Naidu, M.R.Sai Hitesh, T.Dhikhi, Department of Computer Science and Engineering Saveetha School of Engineering Saveetha University, Chennai.	This application helps the deaf and dumb person to communicate with the rest of the world using sign language communication plays an important role for human beings. Communication is treated as a life skill. Keeping these important words in mind we present this project to mainly focus on aiding the speech impaired and paralyzed patients. Our work helps in improving the communication with the deaf and dumb. Speech-to-sign technology and VRS enables audible language translation on smart phones with signing and application	Without the knowledge of using the other languages its took too difficult to communicate.	Develop or expose with their own mother tongue.

			has characters feature in mobile without dialing number uses a technology that translates spoken and written words into sign language with video. Interaction between normal people with blind person is very difficult because of communication problems. There are many applications available in the market to help the blind people to interact with the world. Voice-based email and chatting systems are available to communicate with each other by blinds. This helps to interact with persons by blind people. This application includes a voice based, text based and video-based interaction approach.		
2.	HAND ASSISTIVE DEVICE FOR DEAF AND DUMB PEOPLE.	Deepak Sharma, Kenil Vora and Shivam Shukla. Thakur College of Engineering & Technology, Thakur Village, Kandivali(East), Mumbai-400101, India.	Dumb people can communicate only through the use of sign conventions or with the help of interpreters .The difficulty with sign languages is that the normal person might not know the sign language at all and hence the communication between the deaf and dumb people can become impossible in such scenario. Thus, in order to make them self-reliant and give them the freedom to communicate with normal people without the use of interpreters can be made possible by developing a system which helps them	To handle the device for any people should need a help for starting with the device of communication.	For the help of the device, it could be the assist of by itself.

			<p>communicate directly with the normal person without any interruptions and thereby expressing their feelings and emotions. The system developed should be portable as well as power efficient so that it can be utilized by every needful person. Henceforth, a device which is portable and translates the sign languages into speech output for dumb person and text output for deaf person would be proficient to bridge the communication gap. Thus, the main objective of this project is to develop a device which will be an embedded system comprising of the microcontroller, hand gloves, flex sensors, accelerometer sensor, voice module, speaker and amplifier primarily which will consume less power and will be highly accurate and will produce output based on the hand movements made by disabled people.</p>		
3.	Design and implementation of deaf and mute people interaction system	Assist. Lect. Fadia Noori Hummadi Al-Nuaimy Biomedical Engineering Department University of Baghdad	The development of the devices that help the deaf and mute people to communicate with normal people began a long time ago. They find difficulties to express their thoughts or to convey their message to other people so that the researchers attempt different ways in order to produce a device that may give them a better	It's Hardly to use for the first time without artificial intelligence, on the other side it should be only the design to make it.	The making or a model of implementation should to be the next level of communication.

Baghdad, Iraq

quality of the life to work in basic situations. To achieve this, the system combines the use of a set of different modules, such as gesture recognition, sign language analysis and synthesis, speech analysis and synthesis, haptics, into an innovative multimodal interface available to disabled users. In the recent years, there is a rapid increase in the number of speech - disabled victims due to several reasons like by birth, oral diseases, accidents, etc... and need for the Electronic Assistive. This project is useful for the deaf and dumb, it can also be used for the (speechless) patients with half of their bodies paralyzed and who are not able to speak but are able to move their fingers. The project has been used Glove which will assist those people who are suffering from any kind of speech defect to communicate through their hand pressures. The glove will record hand press made by the user and then the glove will translate these presss into visual form as well as in audio form. Demonstrated the use of flex force sensors to detect the finger's presses

4.	Deaf-Mute Communication Interpreter	Anbarasi Rajamohan, Hemavathy R., Dhanalakshmi M.	Communications between deaf-mute and a normal person have always been a challenging task. The project aims to facilitate people by means of a glove based deaf-mute communication interpreter system. The glove is internally equipped with five flex sensors, tactile sensors and accelerometer. For each specific gesture, the flex sensor produces a proportional change in resistance and accelerometer measures the orientation of hand. The processing of these hand gestures is in Arduino. The glove includes two modes of operation – training mode to benefit every user and an operational mode. The concatenation of letters to form words is also done in Arduino. In addition, the system also includes a text to speech conversion (TTS) block which translates the matched gestures i.e. text to voice output.	The sensors of the device may be gets failure in some cases.	The design of communication of the deaf and dumb persons needs a physical assistance
----	-------------------------------------	---	--	--	--