REAL-TIME COMMUNICATION SYSTEM POWERED BY AI FOR SPECIALLY ABLED IN HEALTH CARE

TEAM ID : PNT2022TMID50812

TEAM LEADER : SHUNMUGA PRIYA K.R (953219106034)

TEAM MEMBERS : ISHWARYA.K (953219106012)

SANTHANA SWATHI (953219106029)

AJITHA.K (953219106003)

DEPARTMENT : ECE

COLLEGE NAME : UNIVERSITY VOC COLLEGE OF ENGINEERING , THOOTHHUKUDI.

LITERATURE SURVEY

BASE PAPER

MORFORD, JILLPATTERSON, AND MACFARLANE, JAMES, WINTER 2003,"FREQUENCY CHARACTERISTICS OF AMERICAN SIGN LANGUAGE". SIGN LANGUAGE STUDIES. Uneducated Deaf Dumb people can communicate with other people (normal or handicaps) with sign language only, so they face serious problems in their daily life. For example: restaurants, transportation, hospitals, government offices etc. Therefore, they need an effective tool to translate their words from sign language to Arabic or English language directly. This tool can facilities their communication with normal people and encourage them to learn both Arabic and languages. Also, Deaf-Dumb kids needs to learn sign, Arabic and English languages in an interesting way. For the above reasons, the motivation of our application is to offer a service to the society in general and to Deaf-Dumb people in particular. Hoping this application can give a hand to uneducated Deaf-Dumb people who could not read and write Arabic languages to communicate with others, to learn

and to entertain.

REFERENCE PAPER

S. ZHAO, M. WANG, Z. WEI, 2013, "A NEW TYPE OF DEAF-MUTE SIGN LANGUAGE RECOGNITION SYSTEM BASED ON THE MOBILE COMMUNICATION PLATFORM AND TERMINAL EQUIPMENT" ADVANCED MATERIALS RESEARCH. These Techniques only enable communication between deaf and dumb through sign language using mobile phones. The mobile application which proposed in helps to make recognition of sign language.

GOSLING, JAMES; JOY, BILL; STEELE, GUY; AND BRACHA, GILAD."THE JAVA LANGUAGE SPECIFICATION" 2ND EDITION. We used java because it is platform-independent and flexible in nature. The most significant feature of java is to run a program easily from one computer system to another.

M. MOHANDES, M. DERICHE AND J. LIU, "IMAGE-BASED AND SENSOR-BASED APPROACHES TO ARABIC SIGN LANGUAGE RECOGNITION," IN IEEE TRANSACTIONS ON HUMAN-MACHINE SYSTEMS, AUG. 2014. It's firstly based on an Arabic sign language which automates the process of being translated on to give a subtle way of communication and further they have shown that the scope of their project apars the usage and defined set of measurements. The application directly converts the Arabic sign language into a meaningful sentence by applying an automated Machine learning algorithm as they concluded.

PROBLEM STATEMENT

In our society, we have people with disabilities. The technology is developing day by day but no significant developments are undertaken for the betterment of these people. Communications between deaf-mute and a normal person has always been a challenging task. It is very difficult for mute people to convey their message to normal people. Since normal people are not trained on hand sign language. In emergency times conveying their message is very difficult. The human hand has remained a popular choice to convey information in situations where other forms like speech cannot be used. Voice Conversion System with Hand Gesture Recognition and translation will be very useful to have a proper

conversation between a normal person and an impaired person in any language.