

# Sense technology

[Technology](#)



**ASSIGN  
BUSTER**

Unlike virtual reality, augmented reality does not create a simulation of reality instead it takes a real object or space as the foundation and incorporates technologies that add contextual data to deepen a person's understanding of the subject. It's a term for live direct or indirect view of a physical real world environment whose elements are augmented by virtual computer generated imagery. Gesture recognition is a term with a goal of interpreting human gestures through mathematical gestures and mathematical algorithms.

Computer vision is the science and technology of machines that is concerned with the theory behind artificial systems that extract information from the images. As a technological discipline, computer vision seeks to apply its theories and models to the construction of computer vision systems. The examples include the controlling processes, detecting events, organizing information, modeling objects or used widely in car automation and home appliances. It eases the operation and saves the utilization time of the manual operations performed by the humans every day.

The speech recognition process is performed by a software component known as speech recognition engine. The primary function of this is to process the spoken input and translate it into text which the application understands. The application then can do one of the two things, 1. The application can interpret the result of the connection as a command, in this case application is a command and control application. 2. If the application handles the recognized text as simply text, then it's considered as dictation application.

When the user says something, it is known as utterance. An utterance is a stream of speech between two periods of silence. The speech ICC can be used for all sorts of data, statistical models, and algorithms to convert spoken input into text.

III. DESIGN AND WORKING

The sixth sense device comprises of 1 . Wearable projector 2. Mobile device 3. Speech ICC 4. Mirror

The sixth sense device is a mini projector coupled with a speech ICC and a cellophane, which acts as a computer and our connection to the cloud, all the information stored on the web.

The components are controlled by or communicated with a mobile computing device carried in the user's pocket. The hardware components are coupled in a pendant like mobile wearable device . Both the speech ICC and the projector are connected to the mobile computing device in the user's pocket. The projector, projects the visual information enabling surfaces, walls and physical objects around the user to be used as interfaces. While the speech ICC stores commands which were trained by the user and executes the corresponding action through the projector, enabling the actions from the mobile device.

A remote computer can also be connected which gathers data from user , processes it, searches the web for relevant execution of the command and returns the result in real time to the user. The speech ICC is trained with regularly used operating data and thus it acts as a database for storing all such commands. There evolved many speech integrated circuits with fabulous technical aspects to be embedded for vast kind of applications.

There are three ways for speech recognition and language understanding. 1 . Multipurpose processors intended for embedded applications. . Customized

<https://assignbuster.com/sense-technology/>

integrated circuits for speech recognition and language understanding. 3. Implementing speech recognition and language understanding as part of larger integrated circuit in the device. Some integrated circuits can be used for less than 15 words, which have a menu based type of interaction whereas other ASIA integrated circuits can be used for hundreds of words which possess natural language understanding. The ICC will be trained with a sophisticated neural network to recognize the commands and activate it correspondingly.

Fig 2: Basic Design of Our Concept 337 input as commands and when such analog speech is received to the ICC, the data is converted into digital and is sent to the mobile device. The mobile device activates the command and is given in turn to the projector. The projector output is seen on the screen through the mirror for accurate projection from the projector which is wearable in the body. For more advanced operations and for accessing net which is our future work, can be accessed from the remote computer simultaneously and projected as before. V.

APPLICATIONS The basic operations such as enabling clock, inbox, browsing, searching gallery, calendar, seeing contact list etc are performed regularly in the mobile every time. These operations can be stored as commands in the ICC and then can be accessed on the screen or over any surface using our technology within fractions of seconds. TABLE I ANALYSIS of TWO METHODS DIRECT MANIPULATION 1 . 2. STRENGTHS 3. 4. 5. Intuitive consists NT look feel options apparent Fail safe Direct engaged . NET with the object NATURAL LANGUAGE 1 . 2. 3. 4. Intuitive Description Context Asynchronous 1. WEAKNESSES 3. 4. Descriptive on Anaphora a Operation n on sets Delayed <https://assignbuster.com/sense-technology/>

actions difficult 1. 2. 3. Coverage's opaque Overkill for short and frequent queries Difficulty of establishing and navigating context Error prone Anaphora problematic Fig 3. Example Of Commonly Used Applications This figure depicts that when clock command is given it's activated in our wrist. This tabulation clearly defines the boon and bane of both the gestures use and voice mode of technology in our sixth sense concept. Both techniques have their own strengths depending upon the kind of applications we use. V.

**CONCLUSION** The sixth sense technology using gesture movement and speech integrated circuits are emerging innovative ideas. We have a seamless access to data or information that may exist to help us make decisions. This provides access to relevant information about the things in the environment and enables the new interactions between the allows us to carry computers in our pockets, there had been no link between the digital devices we carry and our interactions with the physical world, and our speech in a efficient level. Sixth sense is developed to seamlessly integrate information into laity.

The future may depend upon this sixth sense. May be within this 2020, the proliferation and the use of this technology is immense. Sufficient awareness of the sixth sense will lead to further development of any technology Fig 4. Wrist Watch Illusion 338 which aids for getting information and performing any type of action practically at any time, using simply the gestures and commands given. The advantage of this technology is portable, its connectedness between the world and the information as speech. Its cost effectiveness and data can accessed from the machine directly in real mime.