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Telecom & Information Technology



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“You must be the change you wish to see in the world.”

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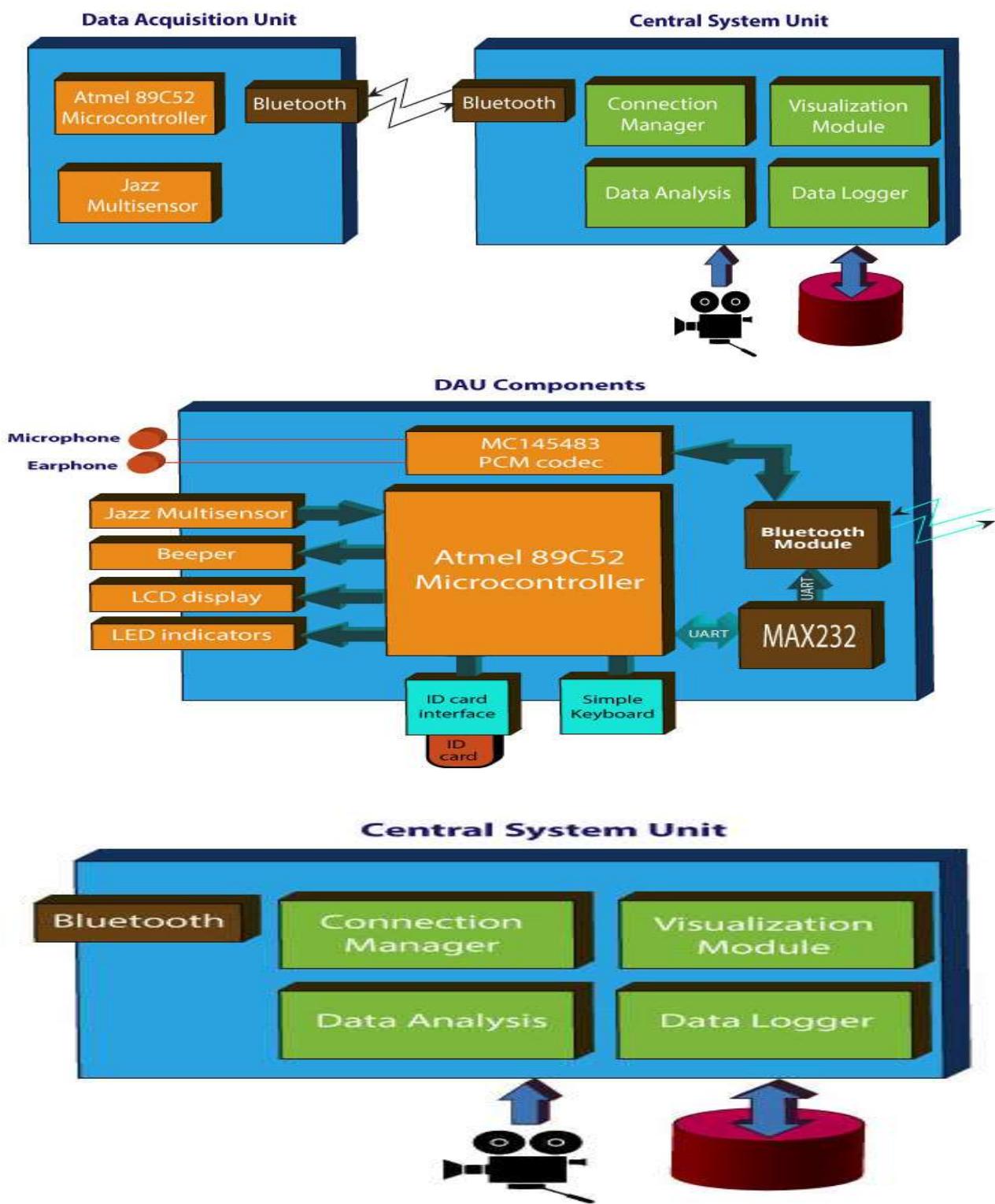
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BLUE EYES TECHNOLOGY

The main objective of Blue eyes technology is to develop a computational machine having sensory and perceptual ability like those of humans. The Blue Eyes technology system is a combination of a set of hardware and software systems.

Blue eyes technology consists of:-

1. Mobile measuring device or Data Acquisition Unit (DAU)
2. Central System Unit (CSU)
3. The Hardware



The steps involved for designing such type of computers are given below.

1. Process of giving sensing capacity.
2. Human Emotion detection or Affect Detection.
3. Respond appropriately and properly

Artificial Intelligent Speech Recognition used in Blue Eyes Technology :

For implementing the Artificial Intelligent Speech Recognition system in Blue Eyes technology, the working environment should be very important. The manner of the user's speech, grammar, noise type, noise level and the position of the microphone are some important factors that may influence the features of speech recognition system. In Artificial Intelligent Speech Recognition system, an automatic call handling method is implemented without any telephone operator.

Two basic ideas are included in the Artificial intelligence (AI),

- Study the thought of human beings.
- Represents the thought process of human beings through robots, computers etc.

Actually, Artificial intelligence (AI) denotes the behaviour of a computer or any machines but it is carried out by the humans is called as 'intelligent'. This AI makes machines more power full, useful, and smarter and also it is less expensive compared to natural intelligence. Natural language processing (NLP) makes artificial intelligence systems to communicate English. The main goal of the Natural language processing (NLP) is to understand the users input and react according to these inputs. The input data or words are continuously scanned and finds matches against inside stored known data or words. And after identifying the key words, the corresponding actions are carried out by the machine. In this way the Blue Eyes technology enables the users to communicate with the machines with their own languages.

Conclusion:

BLUE EYES technological approach assures a convenient technique, that simplifies the life by supporting more elegant and user friendly provision in computing devices. The day is very near, that this Blue Eyes technology will advance its way towards your house hold devices and makes you lazier. In future, even this Blue Eyes will reach as your hand-held mobile device.

COMPUTER VISION

In computer terms, “vision” involves systems that are able to identify items, places, objects or people from visual images – those collected by a camera or sensor. It’s this technology that allows your smartphone camera to recognize which part of the image it’s capturing is a face, and powers technology such as Google Image Search.

As we move through 2020, we’re going to see computer vision equipped tools and technology rolled out for an ever-increasing number of uses. It’s fundamental to the way autonomous cars will “see” and navigate their way around danger. Production lines will employ computer vision cameras to watch for defective products or equipment failures, and security cameras will be able to alert us to anything out of the ordinary, without requiring 24/7 monitoring.

Computer vision is also enabling face recognition, which we will hear a lot about in 2020. We have already seen how useful the technology is in controlling access to our smart phones in the case of Apple’s Face ID and how Dubai airport uses it to provide a smoother customer journey. However, as the use cases will grow in 2020, we will also have more debates about limiting the use of this technology because of its potential to erode privacy and enable ‘Big Brother’-like state control.

Extended Reality

Extended Reality (XR) is a catch-all term that covers several new and emerging technologies being used to create more immersive digital experiences. More specifically, it refers to virtual, augmented, and mixed reality. Virtual reality (VR) provides a fully digitally immersive experience where you enter a computer-generated world using headsets that blend out the real world. Augmented reality (AR) overlays digital objects onto the real world via smartphone screens or displays (think Snapchat filters). Mixed reality (MR) is an extension of AR, that means users can interact with digital objects placed in the real world (think playing a holographic piano that you have placed into your room via an AR headset).

These technologies have been around for a few years now but have largely been confined to the world of entertainment – with Oculus Rift and Vive headsets providing the current state-of-the-art in videogames, and smartphone features such as camera filters and Pokemon Go-style games providing the most visible examples of AR.

From 2020 expect all of that to change, as businesses get to grips with the wealth of exciting possibilities offered by both current forms of XR. Virtual and augmented reality will become increasingly prevalent for training and simulation, as well as offering new ways to interact with customers.

Virtual Reality

What is Virtual Reality?

Virtual Reality (VR) is the use of computer technology to create a simulated environment. Unlike traditional user interfaces, VR places the user inside an experience. Instead of viewing a screen in front of them, users are immersed and able to interact with 3D worlds. By simulating as many senses as possible, such as vision, hearing, touch, even smell, the computer is transformed into a gatekeeper to this artificial world. The only limits to near-real VR experiences are the availability of content and cheap computing power.

What's the difference Between Virtual Reality and Augmented Reality?

Virtual Reality and Augmented Reality are two sides of the same coin. You could think of Augmented Reality as VR with one foot in the real world: Augmented Reality simulates artificial objects in the real environment; Virtual Reality creates an artificial environment to inhabit.

In Augmented Reality, the computer uses sensors and algorithms to determine the position and orientation of a camera. AR technology then renders the 3D graphics as they would appear from the viewpoint of the camera, superimposing the computer-generated images over a user's view of the real world.

In Virtual Reality, the computer uses similar sensors and math. However, rather than locating a real camera within a physical environment, the position of the user's eyes are located within the simulated environment. If the user's head turns, the graphics react accordingly. Rather than compositing virtual objects and a real scene, VR technology creates a convincing, interactive world for the user.

Virtual Reality technology

Virtual Reality's most immediately-recognizable component is the head-mounted display (HMD). Human beings are visual creatures, and display technology is often the single biggest difference between immersive Virtual Reality systems and traditional user interfaces. For instance, CAVE automatic virtual environments actively display virtual content onto room-sized screens. While they are fun for people in universities and big labs, consumer and industrial wearables are the wild west.

With a multiplicity of emerging hardware and software options, the future of wearables is unfolding but yet unknown. Concepts such as the HTC Vive Pro Eye, Oculus Quest and Play station VR are leading the way, but there are also players like Google, Apple, Samsung, Lenovo and others who may surprise the industry with new levels of immersion and usability. Whomever comes out ahead, the simplicity of buying a helmet-sized device that can work in a living-room, office, or factory floor has made HMDs center stage when it comes to Virtual Reality technologies.

Virtual Reality and the importance of audio

Convincing Virtual Reality applications require more than just graphics. Both hearing and vision are central to a person's sense of space. In fact, human beings react more quickly to audio cues than to visual cues. In order to create truly immersive Virtual Reality experiences, accurate environmental sounds and spatial characteristics are a must. These lend a powerful sense of presence to a virtual world. To experience the binaural audio details that go into a Virtual Reality experience, put on some headphones and tinker with this audio infographic published by The Verge.