

Blue Eyes Technology

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Abstract- BLUE EYES technology aims to create an understating between the use and the computer ie; blue eyes technology senses all the actions and the physical mind set of the user using sensors. By this we can undertand the advanced technologies involving in this computer science field so now we are going to see the advanced technology for sensing that is BLUE EYES technology also its evolution,uses,need and drawback too.

I. INTRODUCTION

Blue eyes technology is nothing but a human motion monitoring and an intelligence sensing system. Blue had been working out since 1997 by the IBM , its a human and computer emerging technology in which the computer identifies the motion gestures and all other physical and mental mindsets by using sensors, it also allows facial recognition and speech recognition

This allows the computers to well interact with human beings and its features provides security for the user data because it also provides single user facility

II. COMPONENTS OF BLUE EYES TECHNOLOGY:

Blue eyes technology is hardware and software integrated technology in which the both plays an important role

1. Data acquisition unit (DAU)
2. Central system unit (CSU)
3. Hardware components

Data acquisition unit(DAU):

Data acquisition unit is also known as mobile measuring device.due to the presence of mobile contet in the system. The role of DAU is to collect the phsycological data or information from the sensors which is later then sent to CSU where the processing is done and also verified. The interface between the central system unit(CSU) and the user having the sensor. For users authentication purposes PIN codes and ID cards are used. System-core Bluetooth section, Atmel 89C52 microcontroller, EEPROM, Beeper, LCD

display (HD44780), LED indicator, voltage level monitors and 6 AA batteries these are hardware components present in the Data acquisition unit(DAU).

Central system unit(CSU):

CSU is the next level of wireless network connection in the blue eyes technology. CSU contains mainly a wireless bluetooth module and for the voice information transmission a codec is used which is known as PCM codec. The CSU section is connected to the system using usb cables,parallel and serial cable. The audio data is accessed using the mini audio jack sockets.Only through the serial and power ports all the program containing operators special ID is integrated.I2C EEPROM programming and UART transmission is handled by the micro controller present in the system

III. BASIC STRUCTURE OF BLUE EYES TECHNOLOGY

Modern cameras,microphones and non obstructive sensors are used by the blue eyes technology to create a better interaction with the human beings and also understanding their physiological emotions. The machine gets the ability to check the eye movement of the operator and also the physical postures and gestures by this feature the computer can easily identify the need of the user and provide the information accordingly. The affective computing is the process is in which the computers are having the ability of sensing the emotional capabilities of the user

BLUE EYES technology software:

The blue eyes technology software continuously supervises the physiological condition of the operator. Due to the changes of the operators physiological condition the blue eyes software responses accordingly. The data or the information from the manager are transferred to the data analyzers with the help of blue eyes software. This data will be then transferred to the GUI controls. At last a user supervisor interface section which is supported by the data visualization module. The role of this data visualization module is to fetch the data from the databases and also all other data including physiological data.

BLUE EYES technology design:

1. Providing sensing capacity
2. Detecting human emotions or affect detection
3. Appropriate response

Providing sensing capacity:

Blue eyes technology uses many sensing technologies, which is equal to the human sensitive organs like ears, eyes, sense, Human beings physiological motions and their emotion levels can be understood by the computer with the help of voice recognition technology, bio-metric sensors, cameras,

1. Voice recognition: shows their mental state by how it is spoken ie; louder, gazing, normal, Slow,
2. Camera: to sketch and recognise the facial expression expressed by the operators
3. Bio-metric sensors: It can identify the blood pressure, body temperature, muscle tensions and some other physiological states

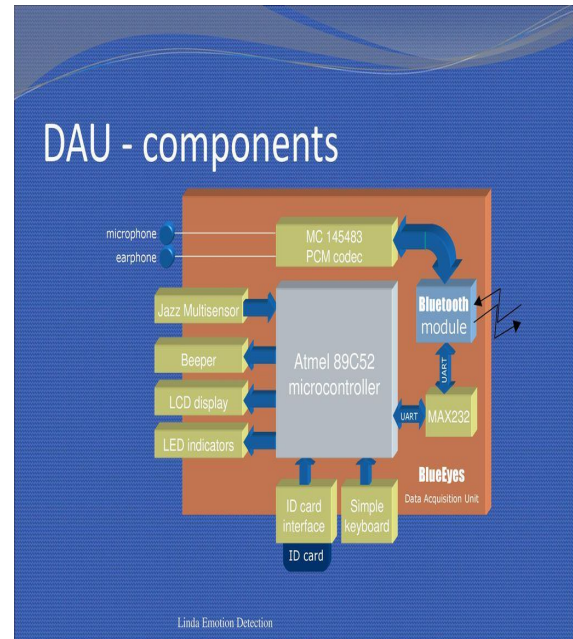
Detecting human emotions or affect detection:

With this facility the machines get the ability to recognize the emotions and moods of the operator, this is done by how the operator is behaving with the machine ie; soft, harsh, medium, etc.... This facility is combined with Emotion mouse, simple user interest tracker (SUITOR) and an advanced voice recognition technology

1. Emotion mouse: this contains pressure sensor, temperature sensor and GSR sensor
2. SUITOR: it will determine the interest of the user and provides the appropriate information to the user

Appropriate response:

With the help of the latest blue eyes technology and its hardware components the user is getting the appropriate data from the machine even without any inputs, these facility is an advanced technology which also include many other technologies ie; voice recognition, facial recognition,

BLUE EYES technology architecture:**IV. CONCLUSION**

Blue eyes technology is an emerging computer technology which allows the machine to recognize the physiological emotions, moods, body temperature, blood pressure, etc... thus it provides the data which the operator has interest for thus it reduces the manpower and work, so the BLUE EYES technology is much needed for this generation