

THE BLUE EYE TECHNOLOGY

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Introduction & History

Blue Eyes Technology is developed by the research team of IBM at its Almaden Research Center in San Jose, California since 1997. Blue eyes technology is used to make a computer understand and sense human feelings and behavior and also makes the computer to react according to the sensed emotions/behavior. The aim of the blue eyes technology is to give human power to a computer, so that the machine can naturally interact with human beings as we interact with each others.



The blue eye technology consists of

- **Mobile measuring device or Data Acquisition Unit (DAU)**

This unit gathers information from sensors and then forwards this information to Central System Unit for further processing. This unit has a Bluetooth module integrated in it which act as an interface between Central System Unit and user or operators which has sensors.

- **Central System Unit (CSU)**

CSU consists of a PCM codec and a Bluetooth module. This CSU is integrated with a personal computer using USB and serial cables. The operators are connected with personal computer through serial and power ports by using operator Ids.

- **The Software Unit**

This software checks and responds to the operator's psychological conditions. This software transfers the information from manager to data analyzers. Then it transfers the processed information from analyzer unit to GUI controls. In last visualization module supports a user supervisor interface section. This visualization module continually fetches information from database. Thus "Blue Eyes" software makes supervisor to know about the psychological condition of operator or user.

Steps to design such type of system

- By providing sensing capacity.
- By providing Human Emotion detection devices.
- Respond appropriately and properly.

Types of technologies used in Blue eyes technology

- **Emotion Mouse**
This is used to sense emotions of people by holding this mouse .
- **Manual and Gaze Input Cascaded(MAGIC)**
This is used to take data directly from both input device and eye gaze tracking of user.
- **Artificial Intelligent Speech Recognition**
By using this User's words are being matched with the stored words in database and actions are performed according to instruction.
- **Simple User Interest Tracker(SUIT)**
Suit is used to track the human behavior work accordingly.
- **The eye movement sensor**
This tracks the eye ball movement of user.

Benefits of Blue Eyes Technology

- It helps in eye monitoring of user.
- It is used in video games, to make them more interesting.
- It is used to monitor psychological and behavioral action .
- It is helpful in power plant control rooms and flight control rooms.

Conclusion:

Blue Eye Technology is very useful in reducing gap between human and machines. It will make Machines to understand human behavior and feelings. And being very useful to monitor the activities of people by their eye movements and expression sensing.

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