



“BLUE EYES HUMAN OPERATOR MONITORING SYSTEM”

ANJALI AM¹, MOHAN BABU C²

¹Student, ²Assistant Professor (Guide), Department of Electronics and Communications J C Institute of Technology, Chickballapur, Karnataka, India

ABSTRACT

The world of science cannot be measured in terms of development and progress. It shows how far human mind can work and think. It has now reached to the technology known as “Blue eyes sensor technology” that can sense and control human emotions and feelings through gadgets. The eyes, fingers, speech are the elements which help to sense the emotion level of human body. This implements a new technique known as Emotion Sensory World of Blue eyes technology which identifies human emotions (sad, happy, Excited or surprised) using image processing techniques by extracting eye portion from the captured image which is then compared with stored images of data base.

INTRODUCTION

It is not far-fetched for people to communicate with computers in a civilization that includes emotion. The primary goal of BLUE EYES TECHNOLOGY is to develop computational devices with emotive and sensory capacities similar to those of humans. This technology is nothing more than a method for sensing human intelligence and human movements. Human comprehension mostly depends on our ability to recognise, explain, and incorporate audiovisuals and sensory data. Giving computers excellent perceptual abilities would enable them to work in tandem with people to create a truly integrated relationship. The Blue Eyes innovation uses technological techniques like eye movement sensors, facial recognition, speech recognition, and others to gather information about you, confirm your identity, feel your feelings, and connect with you.. The Blue Eyes System's goal was to produce a device that could track a user's physiological state as well as their conscious brain activity. It is not far-fetched for people to communicate with computers in a civilization that includes emotion. The primary goal of BLUE EYES TECHNOLOGY is to develop computational devices with emotive and sensory capacities similar to those of humans. This technology is nothing more than a method for sensing human intelligence and human movements. Human comprehension mostly depends on our ability to recognise, explain, and incorporate audiovisuals and sensory data. Giving computers excellent perceptual abilities would enable them to work in tandem with people to create a truly integrated relationship.. The Blue Eyes innovation uses technological techniques like eye movement sensors, facial recognition, speech recognition, and others to gather information about you, confirm your identity, feel your feelings, and connect with you. The goal of the Blue Eyes System was to produce a device that could recognise and document the conscious brain and physiological state of the user.

TECHNOLOGY



Figure 1 : EMOTION MOUSE

This Blue Eyes technology makes the computers to identify these minimal emotional changes of human beings just through a touch on the key board or mouse. The computers starts to respond to the users based on these emotional states. Smart devices like “Emotion Mouse” can be utilized to accomplish this.

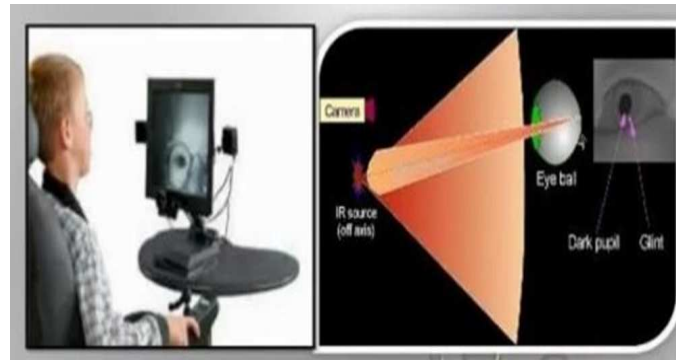


Fig 2: Manual and gaze input cascaded (magic)

Pointing trial, there are two strategies current position towards the new target way the user interacts with today's into learn, is to ignore the previous cursor p for a given input device. F Using Emotion Sensor ng the type of websites that the user links to according lasted sites and suggest the results the user. CASCADED (MAGIC) t needed for target selection Click on the target with a re uses re 6: Manual and Gaze Input Cascaded (MAGIC) technique: cursor is placed in the vicinity of a target the action and decide in which direction to steer the cursor. The conservative MAGIC pointing technique with "i is available to the user. One is to follow "virtual inner get the user is looking at. This is likely the strategy the interface. The alternative strategy, which may be more ad r position and make a motion which is most convenient.

In view, there are two fundamental shortcomings to the existing gaze pointing techniques, regardless of the maturity of eye tracking technology. First, given the one-degree size of the fovea and the subconscious jittery motions that the eyes constantly produce, eye gaze is not precise enough to operate UI widgets such as scrollbars, hyperlinks, and slider handles In Proc. CHI'99: ACM Conference on Human Factors in Computing Systems. 246-253, Pittsburgh, 15-20 May1999 Copyright ACM 1999 0-201-48559-1/99/05...\$5.00 on today's GUI interfaces. At a 25-inch viewing distance to the screen, one degree of arc corresponds to 0.44 in, which is twice the size of a typical scroll bar and much greater than the size of a typical character.



Fig 3: Artificial intelligent speech recognition

Artificial intelligence (AI) involves two basic ideas. First, it involves studying the thought processes of human beings. Second, it deals with representing those processes via machines (like computers, robots, etc). AI is behavior of a machine, which, if performed by a human being, would be called intelligent. It makes machines smarter and more useful, and is less expensive than natural intelligence. Natural language processing (NLP) refers to artificial intelligence methods of communicating with a computer in a natural language like English.

ADVANTAGES

- Greater accuracy.
- Faster speed of operation than manual pointing.
- Eye movement is faster than other current input media.
- No training is required of normal users.
- Reduce manual work.
- It increases efficiency

APPLICATIONS

- Captain bridge
- Flight control centers
- Video games
- Automobile industries.

CONCLUSION

Interface design made enormous strides in the 1990s towards better human-machine interactions. With more delicate and user-friendly features in computing devices, the BLUE EYES SENSOR technology provides a convenient approach to simplify life. The next stage is to enhance the hardware now that the process has been validated. It will be preferable to employ smaller, less obtrusive units to collect user information rather than bulky modules. It won't be long until this technology infiltrates your household and makes you lazier.

REFERENCES

1. Anamika Saini and Ankita Gupta, Blue Eyes Technology International Journal of Engineering Research and General Science Volume 4, Issue 1, January-February 2016.
2. Chandani Suryawanshi T.Raju and S.Madhumitha, Blue Eyes Technology in JSRD International Journal for Scientific Reserch and Development Volume 2, Issue 1, 2014.
3. V. Malarmathi and Dr. E. Chandra, A Survey on Speech Recognition International Journal of Computer Trendsand Technology Volume 4, Issue 9, Sep 2013.
4. G S Ajay K Reddy, Intelligent Wireless Communication System of Cognitive Radio, International Journal of Emerging Science and Engineering (IJESE) ISSN: 2319-6378, Volume-1, Issue-5, March 2013.
5. Anagha P A, International Journal of Engineering Research and Technology Volume 8, Issue 4, 2020
6. Reddy BG and Mala YSM. Blue Eyes Technology. Res Rev Biosci. 2016; 11(3):106. © 2016 Trade Science Inc.
7. McDuff D., Kaliouby R., Senechal T., Amr M.,Cohn J and Picard R.W., Affective-MIT Facial Expression Dataset (AMFED): Naturalistic and Spontaneous Facial Expressions Collected In-theWild, 2013 IEEE Computer Society Conference on ComputerVision and Pattern Recognition Workshops (CVPRW'10), Portland, OR, USA, June 2013.