Eye Tracking- An Extensive Evaluation of a Contemporary and Ingenious Technology

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 179
Number 53

Year of Publication: 2018

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10.5120/ijca2018917276

Abstract

When Google and Andy Rubin introduced the world with the first ever Android phone and a new concept in 2008, somewhere down the line, a group of researchers had curiosity about a technology that can enhance the life of human beings to a massive extent, which was to operate and manipulate thousands of things using the commands from our eyes. As if now, we are using high level technologies that are extremely easy to use, but anyone can imagine that operating our technological stuff with the power of our eyes and retina can be impressive. The devices that we use now-days contain a capacitive touch screen that detects the presence of our skin touch in order to get a command, however the process with the eye tracking is bit different. To have an instance of the eye-tracking technology, let us imagine a mobile game such as 'Fruit Ninja': a game where we cut fruits and vegetables by swiping left or right on our screen, so if we can score in the same game, not with the use of our hands, but with the directions from our eyes, than indeed the technology could be extraordinary.

This research paper will focus on the working and invention of this technology, and the devices
in which its implementation could be possible. After the conclusion, the pros and cons and the futuristic scope of this technology would be stated in a detailed manner as per our research.

References

Index Terms

Computer Science  Information Sciences

Keywords

The Eye Tribe, Formulation and development, reflection of light, infrared rays, calibration, tracking with pupil and cornea, pros & cons, and future scope.