Abstract

Video Oculography (VOG) is a non-invasive, video based method of measuring horizontal, vertical and torsion position components of movements of both eyes using a head mounted mask that is equipped with small cameras. There are systems which use various techniques to detect the opening and closing of the eyes. The technique used in our project is simple and not time consuming. Using blinks to select a sentence or word and playing the sentence has not been used widely in the past. In our project we want to implement this and also build a system whose functionality can be extended to serve a variety of applications. In this system, we use a camera to take input from the user. The user blinks in front of the camera. This is taken as a
video sequence and then it becomes the input to blink detection and counting code. The number of blinks is thus calculated and the sentence corresponding to this count is played. This system works with minimum specification. This would help the lower economical class. There are several methods which can be used to detect the eyes, the method which we have used in our project reduces the time taken for blink detection and also reduces the cost of the system by a large margin.

References

- Rupanagudi, S. R.; Ranjani, B. S.; Nagaraj, P.; Bhat, V. G., &quot;A cost effective tomato maturity grading system using image processing for farmers,&quot; Contemporary Computing and Informatics (IC3I), 2014 International Conference on, vol., no., pp. 7,12, 27-29 Nov. 2014
- Ravoor, Prashanth; Rupanagudi, Sudhir; BS, Ranjani; &quot;Novel algorithm for fingertip blob detection using image processing,&quot;, 4th International Conference on Electronics Computer Technology, 2012, ICECT 2012

Index Terms

Computer Science

Multimedia
Keywords

Eye  Blink  Eye Recognition  MND  ALS  Face Recognition  Electrooculography  Image Processing

Video Processing