Use of Image Processing to Easy e-content Reader for Differently-Abled Personnel

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Differently-abled or physical disability is distinct as limitation of a person's ability to carry out the activities of daily living, to the level that he or she may need help in doing so. The differently-abled personnel, especially people with various amputations face the issue of not being able to use the devices that allow them to access e-content properly. This paper suggests an application that is able to scroll the page of e-content with the human eye. The eyes are identified and tracked in real-time to use their actions for scrolling events. The basic strategy for detection is fast extraction of the face of the image in front of the screen with image processing technology. Between-the-Eyes is selected as a face representative because of its features are common to most people and is easily seen for a varied range of face orientation. After identifying the eyes, the eye movement is used to trigger the scrolling event based on the proposed system.

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