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Iris Detection on RGB Image for Controlling Side Mirror

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Abstract : Iris detection is a process where the position of the eyes is extracted from the face images. It is a current method used for many applications such as for security purpose and drowsiness detection. This paper proposes the use of eyes detection in controlling side mirror of motor vehicles. The eyes detection method aims to make driver easy to adjust the side mirrors automatically. The system will determine the midpoint coordinate of eyes detection on RGB (color) image and the input signal from y-coordinate will send it to controller in order to rotate the angle of side mirror on vehicle. The eye position was cropped and the coordinate of midpoint was successfully detected from the circle of iris detection using Viola Jones detection and circular Hough transform methods on RGB image. The coordinate of midpoint from the experiment are tested using controller to determine the angle of rotation on the side mirrors.

Keywords: iris detection, midpoint coordinates, RGB images, side mirror

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