

عنوان مقاله:

Driver Drowsiness Detection by Identification of Yawning and Eye Closure

محل انتشار:

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خلاصه مقاله:

Today most accidents are caused by drivers' fatigue, drowsiness and losing attention on the road ahead. In this paper, a system is introduced, using RGB-D cameras to automatically identify drowsiness and give warning. In this system two important modules have been utilized simultaneously to identify the state of driver's mouth and eyes for detecting drowsiness. At first, using the depth information, the mouth area and its state are identified. Then using CNN networks, to predict whether the eyes are open or closed, a semi-VGG architecture is used. The results of yawning and eyes states detection are integrated to decide whether an alarm should be issued. The results show an accuracy of about 90% which is encouraging.

کلمات کلیدی:

Driver Drowsiness, Yawning Detection, Deep Learning, Depth Information, Active Contour

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