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(57) Abstract :
DRIVER DROWSINESS DETECTION AND ALERTING SYSTEM ABSTRACT A driver drowsiness detection and alerting system (100) is disclosed. The system (100) comprising: an image capturing unit (102) to capture a real-time video and an image processing unit (104) to receive the captured real-time video for identifying and marking facial landmarks on a face in the video. A controller unit (106) configured to: receive the facial landmarks marked; calculate an Eye Aspect Ratio (EAR); compare the calculated Eye Aspect Ratio (EAR) with a first threshold value; calculate a Mouth Opening Ratio (MOR) and a Nose to Lip Ratio (NLR), when the calculated Eye Aspect Ratio (EAR) is less than the first threshold value; determine a drowsiness condition when the calculated Mouth Opening Ratio (MOR) and the Nose to Lip Ratio (NLR) is less than a second threshold value and a third threshold value; and generate an alert. The system (100) eliminates physical sensors and relies on camera-based monitoring. Claims: 10, Figures: 3 Figure 1 is selected.

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