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(57) Abstract :
Disclosed herein is a driver detection and fatigue monitoring system (100) comprise a high-resolution camera (102) configured to continuously capture real-time video of a driver's face and eye region. The system also includes an infrared sensor module (104) configured to detect eye and blink movements of the driver. The system also includes one or more seat occupancy sensors (106) configured to detect the physical presence of a human driver and distinguish it from inanimate objects. The system also includes an embedded processing unit (108), configured to receive image data from the high-resolution camera and infrared sensor module. The system also includes an alert unit (110) comprising an audio alert unit, a visual alert interface and a haptic feedback module.

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