

Arduino Based Accident Prevention System using Eye Blink Sensor

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Abstract: *Driving while feeling sleepy is a major cause of traffic accidents, particularly on long highway journeys. Current market solutions, like earphones emitting intermittent noises, are often annoying and ineffective. To address this issue, we developed an Arduino-based accident prevention system using an eye blink sensor to monitor driver alertness. The system detects unusual eye blink patterns indicating drowsiness and triggers an alert to awaken the driver. Key components include the eye blink sensor, an Arduino microcontroller, a motor driver, and a DC motor, ensuring a cost-effective and efficient solution to enhance road safety by preventing sleep-induced accidents.*

Keywords: Eye blink sensor, Arduino, Motor driver, DC motor