

# Drowsiness Detection using Python

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**Abstract:** *The Driver Drowsiness Detection System is a sophisticated safety solution designed to mitigate the risks associated with driver fatigue and drowsiness while operating a vehicle. This project aims to develop an intelligent system capable of monitoring driver behavior and physiological signals in real-time, detecting signs of drowsiness, and issuing timely alerts to prevent accidents.*

*The system utilizes a combination of hardware sensors, including cameras, infrared sensors, EEG sensors, and heart rate monitors, to capture and analyze various indicators of driver drowsiness, such as facial expressions, eye movements, head gestures, body temperature, brainwave patterns, and heart rate variability.*

**Keywords:** Eye Surgical Equipment Sensor Board, Signal Integrity, Performance, Reliability