# Driver sleeping detector using obstacle sensor and alerting system

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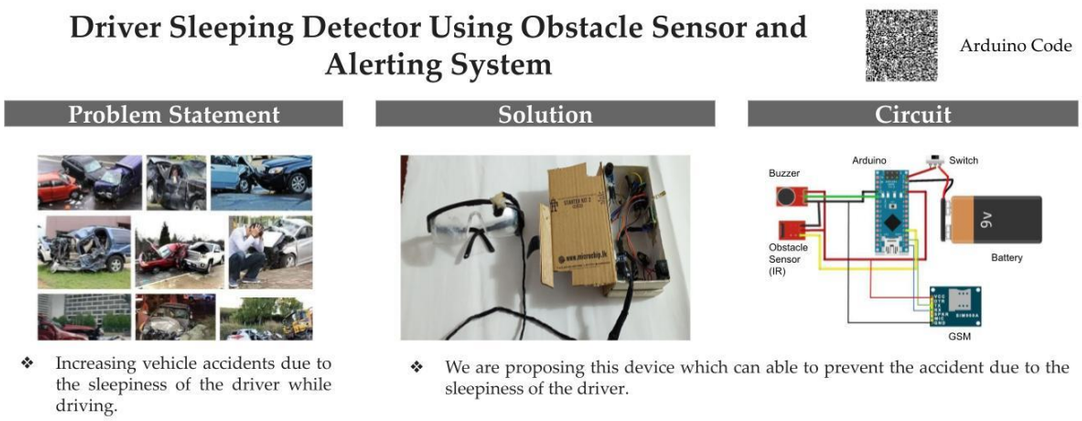


Road accidents are happening mainly due to the sleepiness of the driver while driving. The driver loses control when he falls asleep. It will lead to an accident. Thus, here we are proposing a device which can able to prevent such accidents. The device contains a pair of goggles, an obstacle sensor (IR), an Arduino board, a GSM module and a buzzer. The obstacle sensor mounted on the goggles monitors the driver's eyelid to check whether it is open or not. If the eyelid is kept closed for more than predefined three seconds, the sensor will find and send the signal to the Arduino to make an alarm via buzzer. There is also a communication facility that can make a call to the user via the GSM module. These two alerting methods ensure the reliability of the device. The programmed mobile number can be altered in the Arduino code in order to assign a new mobile number by connecting the Arduino with a laptop/PC through the port present at the lower end of the box. The device has designed to alert the driver/passengers when the driver falls asleep. The ultimate aim of the device is to prevent accidents due to the sleepiness of the driver. The device can be further developed by adding vibration technology to the goggles, which can alert the driver through tangible interaction.

**Keywords:** sleeping detector, driver's eyelid, buzzer