

## ABSTRACT

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*In Indonesia, the number of traffic accidents increases every year, from several factors that cause many accidents, namely feeling drowsiness while driving. This project is very helpful for car drivers to anticipate accidents. This Sleep Detection Hardware is designed using a Raspberry Pi 4, with the prototype method. This system will detect the driver's eye ratio of 0.18 which indicates drowsiness with or without wearing glasses with a light intensity of 199.8 lux, 989.0 lux, and 0.6 lux will also affect this system, and this system also uses Infrared Proximity. A digital vision detects drowsiness if the distance between the driver and the camera is 25 cm. The results of this test camera and output devices run well with an average delay of drowsiness with an output device of 07.28 seconds. The system will turn on the output device as a warning sign for the driver which is expected to reduce the number of accidents due to drowsiness.*

*Keywords : Drowsiness, Accident, Raspberry Pi 4, Output*