

ABSTRACT

In Indonesia, traffic accidents often occur because of the main factor of the driver. Factors that cause accidents include drowsiness, and fatigue while driving can cause accidents to vehicles. The purpose of this study is to help reduce the number of accidents due to driver negligence in driving. To reduce the number of vehicle accidents, the drowsiness detection system is made to help drivers be more alert when driving. This Sleep Detection Software is designed using the Python language, with the waterfall method. This system can detect the driver's eyes to determine whether the driver is checking or not. To determine sleepiness, this system can determine the ratio of the eyes, for eye ratios below 0.18 the ratio of the driver can be said to be assessing or eyes in a closed state. The system that can determine the eye point is designed using the facial landmark method so that it can easily determine the eye point on the face. The time specified when the eyes are closed is more than 5 seconds, if the eyes are closed for more than 5 seconds, the new system runs as a sleep detector.

Keywords: Sleepiness, Accident, Python, Vehicle.