

## **ABSTRACT**

*Everyone needs adequate rest to carry out daily activities optimally. Adequate rest can make the body not tired and sleepy. Drowsiness can interfere with activities due to decreased concentration and drowsiness while driving is very dangerous. By using cameras and artificial intelligence, a system can be developed to detect whether a person is sleepy or not. This study designed a system to detect drowsiness for drivers using facial and eye images based on the Haar Cascade method. Haar-like feature or Haar Cascade Classifier, is a rectangular function that gives an indication of an image. This Haar-like feature is used to analyze images by processing the boxes contained in them. Then process each square and generate different values to indicate the dark and light areas. This study used 1,600 images and 200 system tests for the eye parameters used. After testing based on the eye condition parameters used with the Confusion Matrix and Performance Matrix, the accuracy value is 92.5%, the precision is 89.71%, and the recall is 96%.*

**Keywords:** *Traffic accidents, sleepiness detection, OpenCV, Haar Cascade*