

## ABSTRACT

*The Global status report on road safety reported by the World Health Organization (WHO) in 2018 states that the number of deaths caused by road traffic each year has reached 1.35 million. . This number is certain to increase if no action is taken to reduce the number of accidents. The accident itself was due to the lack of knowledge of motorists about traffic signs, especially speed signs, causing the rate of increase to increase. So that technology is needed to be able to find out or get information about these signs by using Computer Vision technology. This study aims to classify the image of high speed barrier signs using Convolutional Neural Network. The Convolutional Neural Network (CNN) method is currently known to have the most significant results in image recognition, one of which is image classification on traffic signs. Recent advances in CNN have carried out the method as a technique in the task of image classification and is one of the Deep Learning that is able to carry out independent learning processes for object recognition, object extraction and classification. In this study, using a dataset obtained from kaggle with 1266 data consisting of three classes, namely 60Km/h, 80Km/h, and 100km/h. This research was conducted in several stages of the process, namely data collection, model making, Training and Testing. The learning process of network quality is 100% accuracy of the Training data in epoch 15. Testing of data Validation Validation is 100% accuracy and the resulting accuracy of data Testing is 99.37%. So it can be said from the results of this study indicate that the use of the CNN method which is designed for high speed image classification can work well.*

**Keywords :** *Traffic Signs, Classification, CNN, Accuracy, Epoch*