## ABSTRACT

The number of traffic accidents is increasing every years. Most traffic accidents involve various types of vehicles, especially car. Many factors cause of a traffic accident, where speed is one of the cause of accidents. Accident caused by high-speed car are a main factor in speed accidents carried out by motorists.

Based on the exposure above, Many irresponsible parties use car at high speed in traffic, causing accidents. Therefore, the author created a final project that aims to minimize speed violations and minimize accidents caused by speed entitled car speed violation detector tool based on you only look once(YOLO). The authors used YOLO to help detect car of different types of cars and measure detected speeds, as well as use the Region Of Interest to make it easier for the areas the authors would detect. After the car is detected and the speed used, if the car detected committed a speed violation, then the car detected to have committed the violation will be screenshoted. The author used python language to write code related to this final project.

This system is used to minimize accidents and speed violations committed by irresponsible parties. This system is used to minimize accidents and speed violations committed by irresponsible parties. With the final result of the video import method from the detection of 2 videos which produces an average detection of 90.9% and with the final result of the realtime method produces an average detection of 76.9%, can calculate the speed, and detect offenders who violate the predetermined speed and it will be screenshooted.

Keywords : Speed, Car, Python, Region Of Interest, You Only Look Once