

**Abstract**

Much of our time is spent on the road. It can be worse by traffic jams, closed roads, and slow traffic flow. Road damage is one of many causes of the slow traffic flow because the vehicles who pass that road need to move slower to prevent an accident.

Single Shot Detector (SSD) is one of many methods that can be used for recognizing an object. With Convolutional Neural Network (CNN) principle but with more development by adding object detection and bounding box to detect more than 1 object in 1 image.

With a system that can recognize road damage on the road. Road work will be faster and can be used on self-driving-car

**Keywords:** road damage detection, object detection, single shot detector