

ABSTRACT

In today's era, accidents between vehicles often occur everywhere, especially in the city center, it is due to the negligence of the driver. In this study, a vehicle distance meter will be designed using OpenCV with the Haar Cascade method.

The Haar Cascade method is one of machine learning that is commonly used as an object detection application (face recognition is preferred). Before carrying out this method, there must be a process of identifying the identification of the object being targeted. The object identification process uses the Haar Cascade algorithm itself, the algorithm is commonly used to recognize object distances and object detection. Then Haar Cascade implements a cascade function in which there are 4 processes: (1) Determining Haar Features, (2) Creating integral images, (3) Adaboost Training, and (4) Performing cascading classifier classification.

The object distance calculation system with the camera that has been made can detect the object distance with an error rate that will be determined depending on the video resolution and fps (frame rate) even though it is within a limited range.

Keywords: Computer Vision, Haar Cascade, Object Distance.