

## **ABSTRACT**

Car classifications is necessary because it can help the human tasks. The classification can be based on the type of car and color of a car. Classification by type of car can be used in toll booths or parking area, while the color classification can be used to view a specific car brands, especially trucks. Moreover the classification of types of cars can also be used as reference data of a dealer to open a branch in an area by looking car graphic which entered from the nearest parking area.

An image can gives important information for humans. From these images human can analyzed so that the human can distinguish one type of object. For example we can distinguish a type of car like a sedan, bus, or truck. Computer Vision created in order to help humans to analyze an object . Computer Vision is the branch of science that is able to interpret visual assessment of an original power.

The system which that the outputs is a car based on the type and color have been created in the Final Project. The system is using Multi Scale Wavelet Transformation as edge detection and K Nearest Neighbor as classification method by giving best performance in 89,167 % for type accuracy, 53,33% colour accuracy and 4,5829 second for type, 0.274 second for colour processing time.

**Keywords:** Cars Classification, Computer Vision, Multi-Scale Wavelet Transformation, K Nearest Neighbor.