

ABSTRACT

The Tire conditions is one important aspect of road safety standards and the feasibility of a passenger in Indonesia which is now a little neglected, it is suppose to be one of the causes of accidents in this sistem Indonesia. Saat existing tire due diligence carried out by utilizing the power humans, but humans have limited energy, thoughts, and psicology. The inspector will have trouble when people are faced with many passenger tires to be tested and confronted with the unruly behavior of the driver and the road transport entrepreneurs who try to commit acts of bribery to try to give some money order, or provide recommendations officers pass roadworthy.

The final project was created with the purpose to simulate a sistem capable of analyzing whether there is damage to the tires used in the process of testing the feasibility of road public transport by using Local Binary Pattern (LBP) for the initial phase characteristics extraction where LBP is used to look for patterns in the image , LBP is defined as the ratio of the value of a binary pixel in the center of the image with pixel values around it. After that, compile the binary value into a decimal value to replace the value of the pixel at the center of the image. Results of LBP will produce a feature vector that is used as masukan to the Characteristic's database image classification using the K-Nearest Neighbor (KNN).

The Results of a simulation sistem can detect any damage to the tire surface public transport, which is where this sistem has an accuracy that qualified with the best accuration is 91,82%

Keywords: *Tire Surface damae of the public transportation, Local Binary Pattern, K-Nearest Neighbor*