

ABSTRACT

Criminalization in Indonesia is increasing statistically, especially “the robbery” in mini market. This thing, of course make the society in big town feel so unsecure and uncomfortable. They feel worry when they try to buy something in mini market at night. The modus in this robbery is likely the same in every occasion. The robber will try to threat the cashier with the weapon they bring, such as knife, machete and even with gun. They’re not afraid to hurt or even kill anybody just to accomplish their mission. The robbers are also wear a mask or a helmet to protect their faces, so there won’ t anybody acknwoldge them when they do their action.

To overcome this, the manager should provide the means to minimarket to anticipate the occurrence of robbery. Means are expected to reduce the rate of robberies that occurred in the mini market.

This final project “**Deteksi pelanggaran penggunaan helm di dalam mini market berbasis video processing**” will try to explain the research of the detection of the people who try to enter the minimarket using the helmet. This research uses the characteristic vector for the extraction and will be classified using the K-NN method.

The accuracy of the detection can reach to 93.71% in offline mode with these parameters: the threshold cropping value is 5, the normalization block size is 300 x 300, the sum of characteristic vector is 12 x 12, classification using K-NN with the value of "k"= 1 and type of distance is Euclidean. Meanwhile, the system will reach 76.19% accuracy when it tested in real time mode.

Keyword: Video Processing, K-NN, Characteristic Vector.