

ABSTRACT

In choosing chicken to be consumed should be more careful. Many merchants are not responsible for selling chicken unfit for consumption, such as chicken carcasses or better known as “Ayam Tiren”. Meat quality is affected by the condition of the animal before, while still alive and how it is treated after been slaughtered. When we consume unhealthy chicken can cause disease. To choose a good chicken there are a few things to be aware such as the color and texture of the meat. This has encouraged the author to create this thesis.

This thesis, is designed to detect Chicken carcasses based on digital image processing in Android application which is called Chicken Detection. This application has two methods, which are color and texture analysis. In color analysis stage, calculate the mean value and sum of different of the pixels based on red, green and blue color image. On texture analysis stage, convert the RGB image to grayscale and calculate pixels from thresholding result.

Chicken Detection application is now able to detect the normal chicken and chicken carcasses in non-realtime and realtime. Level of accuracy in a non-realtime system is 93,31%. And level of accuracy in realtime system is 81,39%. So, the overall accuracy of chicken detection application is 86.85% with the average computing time is 319.7 milliseconds.

Key words : Chicken Carcasses, Digital Image Processing, Mean, Sum of Difference, Thresholding, Android.