

ABSTRACT

Image texture segmentation is a method contained in the processing of digital images, the main function of image texture segmentation is to look for patterns on an image which can then be used for classification purposes. The image that can be used in image texture segmentation is an image that has the characteristics of a texture, which is a texture is an image that has an intensity or color that is uniform or homogeny. One of them is the image of cotton cloth that is not uniform, but it contains variations in the intensity of the colors that form repetitive patterns. So that cotton image can be used as image texture segmentation object

This final project aims to get the feature values on the cotton image with the statistical texture analysis method of Gray Level Run Length Matrix which has 5 feature values that is, SRE (Short Run Emphasis), LRE (Long Run Emphasis), GLN (Gray Level Non -uniformity), RLN (Run Length Non-uniformity), and RPC (Run Percentage). Then will do the classification of cotton image type to get the value of system accuracy that has been designed with Euclidean Distance method.

The results obtained from this final project is a system that can be obtain the feature values on the cotton image. The best accuracy value generated by the system is 33.33% using 72 training images and 48 test images.

Keywords : *Cotton Fabric, Grey Level Run Length Matrix, Euclidean Distance*