

ABSTRACT

The skin is the outermost layer of the body that has the function to protect the organs that exist inside the human body, besides the skin also includes important organs that exist in the body. The type of human skin in general consists of three types, including normal skin, dry skin, and oily skin. Dry skin type is a skin that has a low water and oil content. Normal skin type is a type of skin that has high moisture content and low oil content so it is called normal. Oily skin type is a type of skin that has a low water content and high oil content.

In this study, authors used the GLCM (Gray Level Co-occurrence matrix) method as a method of extraction and LVQ (Learning Vector Quantization) method as a classification method. The purpose of this research is to perform analysis of system performance in identifying human skin type with GLCM and LVQ method.

By designing skin type Identification System using GLCM method (Gray Level Co-occurrence matrix) and LVQ (Learning Vector Quantization) based on Android It is expected that the system is able to know skin type based on its microscopic image. The best accuracy obtained in this study was 67% with the parameters used namely image size 512x512, quantization level 8, angle orientation 450, with pixel distance 2 using contrast, correlation, energy and homogeneity features, learning rate 0.01, and epoch layer 50.

Keywords: Human skin type, GLCM, LVQ