

ABSTRACT

The skin is a part of the human body that needs treatment. Improper care of the skin can cause harm to someone. Therefore, we need proper knowledge of skin analysis where one of them knows the type of facial skin. There are several skin types, namely oily and dry. Each type of skin has different treatments and products.

In this study, an image processing system was created that can detect human skin types. This system processes the image of human skin taken with a digital microscope. The image of human skin used is the image of the cheeks for oily and dry skin. The images used are 40 for each training data and test data. The image processing process consists of three stages, namely pre-processing, feature extraction using the DWT (Discrete Wavelet Transform) method and classification using the backpropagation method. After going through these stages, the data is classified according to the type of oily or dry skin.

The results of this study indicate that the system can distinguish oily and dry skin types with an accuracy level of 95%, with the same amount of training data as the test data.

Keywords: Facial skin, DWT, Backpropagation