ABSTRACT

Skin cancer is a cancer that is quite malignant in the world. Skin cancer ranks third as a deadly cancer. Quick handling of this case will greatly help medical personnel in dealing with this cancer. Therefore we need a way for medical personnel to know quickly and accurately in diagnosing and immediately taking medical action. In this final project, a system for early detection of skin cancer is designed so that it can maximize medical treatment for sufferers.

In this final project, a skin cancer early detection system is designed using the Gray Level Co-Occurance Matrix (GLCM) method from skin cancer images. This system will then classify the processed image. At the stage of the system classification using the K-Nearest Neighbor (K-NN) classification method.

From this test, it produces a skin cancer detection system with the best accuracy of 80% when testing using a combination of 4 GLCM features (Contrast, Correlation, Energy and Homogeneity) and when using K = 7 in the K-Nearest Neighbor (K-NN) classification with the Euclidean and Minkowski equation.

Keywords: Skin Cancer, ***Gray Level Co-Occurance Matrix (GLCM), K-Nearest Neighbor***