ABSTRACT

The skin is the largest part owned by humans, the skin. The skin can be susceptible to diseases such as melanoma skin cancer, melanoma skin cancer has a high risk and is difficult to detect because of the cost of examination and expensive tools. So we need a technology system that can detect disease at low cost and quickly in diagnosing disease.

In this study, a melanoma cancer skin detection tool was designed using a RaspberryPi and a Pi camera that was processed with machine learning. The image taken using the Pi camera is processed using a Raspberry Pi and the image is pre-processed to simplify the process at the next stage. At this stage the image is changed to a large or small image so that it gets the desired pixel. After that, the image is extracted using the GLCM (Grey Level Co-Occurance Matrix) extraction method to get the matrix texture value then classified by the SVM (Support Vector Machine) method and the results are displayed on the monitor. The result for accuracy using GLCM and SVM is 91%.

Keywords ; GLCM (Grey Level Co-Occurance Matrix), Melanoma skin cancer, Image processing, SVM (Support Vector Machine).