

ABSTRACT

Technological advances demanded everything can be handled by a system, as in the process of identifying a person. At this final tasks conducted the analysis for the introduction of the palmprint automatically. Preprocessing input image will be automatic in the region to get the important area of the image of the palm. Furthermore, we will look for characteristics of the image using the Principal Component Analysis (PCA) and classified using a Support Vector Machine (SVM).

PCA method has the ability to reduce the dimensions of data while still maintaining the information and data characteristics. The concept of SVM can be explained simply as an attempt to find the best hyperplane which serves as a separator of two classes in the input space. The concept of a linear SVM classifier, but the SVM can be modified by using the kernel trick, which can be used to solve non-linear problems.

Based on the results of tests conducted on 500 training data and test data 500, the system is capable of automatically identifying the palm of the hand with an accuracy of 98% (480 data has been identified).

Keywords : preprocessing, automatic region, clasification, *Principal Component Analysis (PCA), Support Vector Mechine (SVM)*