

## ABSTRACT

Palm print Recognition is a process to recognize and identify the person. Palm print recognition including biometric technology that uses human characteristic. At the present this technology can be used in a variety of things one of them is for security, for introduction the identity, to increase efficiency and effectiveness in all aspect of life by reducing the use of IDs and Password.

On the palm of the hand there are many different unique characteristics of each individual and will not change unless a serious accident. Use the palm of the hand produces a better character in the identification because the palm has a large surface. In this final task is used *Independent Component Analysis (ICA)* as a feature extraction algorithm and *Support Vector Machine (SVM)* as classification method.

In practice, the digital image of the palm was taken using a scanner, then enter the preprocessing stage. Image output from the preprocessing stage will be extracted using ICA algorithm and then stored in a database. Classification database will be done with the SVM method. Result (output) is desired is how a system can identify and compare patterns of palms and can make informed decisions on each type of pattern of certain palms become input. The level of accuracy obtained in this final task is 94,81 % for image without rotation.

Keyword : biometric, Palm Identification, *Independent Component Analysis (ICA)*, *Support Vector Machine (SVM)*.