

## **Abstract**

*Biometrics based on human iris has a unique high and can be used as a medium security. In addition, because the iris in the eye and are protected by the eyelids, the iris pattern has the consistency and stability of a very long time if compared with other human characteristics.*

*In this final, analyzing an iris biometric system based on combining the method of Linear Discriminant Analysis (LDA) as a method of feature extraction and Support Vector Machine (SVM) as method for classification of the iris. However, this system requires preprocessing of dimension reduction using Principal Component Analysis (PCA). By using these methods, a system built able to recognize 40 test data with the highest accuracy was 100%. The highest accuracy can be achieved by using the parameters of the PCA, LDA and SVM appropriate. Selection of eigen values and eigen reduction vector in the PCA and LDA are not too big and not too small, between 70 to 99. Selection of SVM kernel function with the type of data distribution and the need, in this final project using linear kernel function, using parameter values C (which determines the penalty) equal to 180.*

**Keywords** : *biometric system, human iris, PCA, LDA, SVM.*