

## **ABSTRACT**

*Biometric technique is one of the techniques that can identify a person based on physiological and characteristics. Various biometric techniques used to verify someone's identity. Biometric techniques are often used for a person's identity is the iris scan, voice recognition and hand geometry. In this research will be made of a shape recognition software from hand geometry. Sample the hands of each person will be taken and processed to find what kind of parameter can make every person different.*

*Some ways used in Pre-processing, there are techniques grayscale, median filter, black white, closing and opening process, to make this image ready for characteristic extraction. In the feature extraction process, will take information from 14 major lines that represent the structure of the hand to produce a feature vector, then used for the identification process. The performance of the system is measured with accuracy level for matching the testing data toward the existing database. From this project the accuracy is 92.4% of the 20 people sampled, where everyone is taken 7 images, consisting of 2 training images and 5 test images.*

*Keywords: Biometrics, Image Processing, Introduction to Hand Structure*