

## ***Abstract***

*Biometrics has now evolved as an alternative step in the user authentication system by the representation of individual characteristics as a means of identifying a person in accessing the system which is their access rights.*

*Palm vein biometric is one of the features that can be adapted as a means of identification of individual recognition, because it has a distinctive pattern or vein structure that distinguishes an individual to another individual and has its own reliability when compared to other biometric characteristics, since palm vein located in the sections below leather, it is difficult to see with the naked eye or a regular camera, it takes a near-infrared camera (NIR) to capture the image of the palm vein.*

*By applying the method of LBP as feature extraction algorithms on palm vein image and histogram intersection in the matching process with a ratio of model data and test data is 3: 3, the testing is done by applying some test scenarios radius parameter value changes, the number of neighborhoods, the number of region, size adjustment image, and measurement of the FAR and FRR optimal threshold value. Optimal configuration is obtained with 8 number ketetangaan, distance radius 12, 16 number of regions, and the threshold value 0.53530564. The performance of the system is able to generate value for FAR and FRR are 0.003333 and 0.006666667, the recognition rate reached 98%.*

***Keywords:*** *biometric, identification, palm vein, local binary pattern*