

Abstract

Every human being has something that is almost unique. The uniqueness of the eye such as the retina or DNA and fingerprints. Uniqueness of human beings is used for the introduction of an identity of the man himself which can be combined with the introduction of using hardware assistance. Of some of the uniqueness, fingerprints or palm prints of the uniqueness more accurately regarded as the fingerprints directly attached to the human body. The introduction of the palm of one's hand is a system that is quite important now. The system memcocokan and compare biometric palm of the human hand that fed with palms stored in a database storage. Therefore, the comparison between biometric palm of the hand that fed previously saved is the first step to classify or identify of the palm of a human being by another.

In this thesis built a system that can detect a person's palm that has been entered into the database by extracting characteristic through contourlet transformation process, once it is optimized by using a genetic algorithm that can recognize the hand of the person correctly.

In this system obtained 97% accuracy with value of population = 50, generation = 5, probability crossover = 0.6 and probability mutation = 0.6 rate using 15 training data and 45 test data so that it can be concluded that the method of contourlet transform and genetic algorithms can be used to identify a human hand because its performance is quite good.

Keywords : palmprint , contourlet , genetic algorithms