

## ABSTRACT

*Face recognition is a biometric technology that has been widely applied in a security system, in addition to eye retina, fingerprint recognition and iris. In face recognition systems it is necessary to use a camera to capture a person's face in order to be comparable to a face previously stored in a particular dataset. In this study face recognition will use embedded computer that allows to identify or verify a person's face through a digital image, the way is by matching the texture of the facial curve with face data stored in the dataset.*

*This study will use the Independent Component Analysis (ICA) method of face recognition, in order to obtain the differences, shortcomings, and advantages of the method. The optimal results of the method are used for face recognition systems using three cameras, each of which has a different angle. In this study also use artificial neural network in face recognition to get face recognition system in real time, because the method of Independent Component Analysis (ICA) can not produce face recognition system in real time. The comparison to be analyzed is the accuracy factor derived from how many epochs are used and how well the learning rate is used. The accuracy factor will determine how accurately the method of recognizing a person's face from the dataset of a stored image.*

*In face recognition system to be analyzed with Independent Component Analysis (ICA) method and artificial neural network is expected to realize face recognition system in real time by using three different camera angles. In this test will perform performance improvements in the accuracy of face recognition, but in getting good accuracy there must be a parameter that goes down, in the computation of the face recognition process.*

**Keyword :** *Independent Component Analysis ,Embedded Computer, Performansi,Face Recognition.*