

Abstrack

Many ways are used by various institutions to the needs of data existence of the charging system. Signature is a way that is considered effective and easy to date. However, this simplicity is often badly used by irresponsible parties, such as the forgery of signatures, which often occurs when the load of data in the presence of the system. A way to overcome this is to use the facial features of digital image processing based on the filling of the presence of data systems. This method has the advantage because their facial characteristics of each individual.

This Final Project design and implement a system based on the presence of facial characteristics by using digital image processing methods based webcam with Neural Networks (ANN) Backpropagation. This is because ANN Backpropagation reliable method in the classification process, where the number of hidden layers, number of neurons in hidden layer, and transfer function are factor that affect the accuracy of the classification process.

In the Final Project, has been testing the value of the optimum accuracy 75% using 60 test image from 20 people.

Keyword : facial image, backpropagation artificial neural network, system of presence