Abstract

Iris of the eye for each individual is different even for individuals who are twins, except that the iris has a stable character in the long term, does not depend on the genetic nature and protected by the eyelids and cornea. With growing recognition system based on the human body's natural characteristics, called biometric systems. Then the human iris can be used as a base

At this final project was developed based on iris recognition system using Cascade Correlation Artificial Neural Network. Cascade Correlation is a type of architecture and supervised learning neural network algorithm. Cascade Correlation begins with a minimum network which only consists of input units and output units and hidden neurons are trained and added one by one automatically to form a multi-layer structure. Once adding new hidden neurons, the weights of the input and previous hidden neuron to the latest hidden neurons will be frozen. The process of forming a dynamic network, it makes the network structure more efficient.

In the tests performed Cascade Correlation Artificial Neural Network capable of performing iris recognition with 100% accuracy of the data train and test data 97.3%.

Keyword : cascade correlation, iris, biometrics, artificial neural networks