

Abstract

Human have the ability to identify and classify some certain patterns. The classification is not static it means that if the pattern change they still able to classify the pattern correctly. This is because human have ability to learn to identify or classify some patterns. This is the same with human face. Human face can be analogue as a pattern which from that pattern we can do some identification or classification such as indentity, age, gender, etc.

This final task research use independent component analysis and support vector machine method to aquaire learning process in human to do the classification on human gender based on human face image and apply them on computer. The success of the methods depends on the correct parameter chosen. So we can build a good system.

As the result of experiment the higest accuracy is 100% on training data dan 84.62% on testing data.

Keyword : *Gender classification, independent component analysis, support vector machine, kernel function.*