ABSTRACT

As the times change, the field of technology is also more advanced with many emerging new technology that is almost unthinkable by most people, one of them is computer vision technology that allows a computer has the ability to resemble the sense of human vision, among the many capabilities that exist most interesting is the ability to recognize Gender someone or often called gender recognition through 2-dimensional images that contain a person's face. The ability to recognize gender has a classification method that can affect its performance, therefore it is necessary to use a classification method that has the reliability to differentiate between men and women gender.

In this final project is designed a system that will process the photo containing the face as input for the system Principal Component Analysis which will produce different data sets of facial photos used.

In this Final Project, the classification system built using Fuzzy Support Vector Machine classification method passes a test to classify person's gender. Based on the test, the system obtained the test results in the form of system accuracy of 76% from 50 achromatic facial image and 50 labeled face image as input data for the system.

Keyword : Fuzzy Support Vector Machine (FSVM), gender recognition, Principal Component Analysis (PCA), computer vision.