

Abstract

Face is one of the important parts in human body. Through face recognition technique, some of information can be known one of them is gender. Some problem often faced in human gender recognition is what feature that represent the male and female face. This need a good choice of feature extraction method to extract the face feature. In the real world, the difference between male and female faces are very close. So, it need the method that can build a best classification model for gender classification.

In this final project, we proposed Active Appearance Model (AAM) as a feature extractor. The face model is built from face images with each landmark points. This model is used to extract the face feature from given face images. Then, the feature vector is classified using Adaptive Neuro-Fuzzy Inference System (ANFIS). This classification is based on soft-classification technique.

As the result of testing phase, we can conclude the optimal landmark points and ANFIS architecture that produce 100% accuration for testing dataset.

Keywords: face recognition, Active Appearance Model, Adaptive Neuro-Fuzzy Inference System, landmark points.