

Abstract

Gender is one of the identities and characteristics in humans that has been widely used in several fields one of which is in the field of the company and in the field of security. Currently there are still companies that are wrong in determining market segmentation, the error occurs because the company does not get enough information in determining its market segmentation. Therefore, many companies need technology that can classify gender automatically so that the company can get more information related to its customers to get appropriate market segmentation. In addition, gender can also be used to narrow down the search for criminals in the database. In gender recognition, faces can be used as input during the process of gender recognition because faces have several characteristics. In this research, a system that can make gender recognition based on facial images will be built. The method used is Speed-Up Robust Feature (SURF) as a feature extraction method and Support Vector Machine (SVM) as a classification method. The accuracy of testing the system to the model built was equal to 91.0%. In this research, the system built has been able to predict male gender well, but this system has a weakness in the image of women who do not wear a veil, so it is not good in predicting the image of women who do not wear a veil.

Keywords : Gender, Recognition System, Speed-Up Robust Feature, Support Vector Machine