

Abstract

Each human's face has its own characteristics which can be used to distinguish each of them with other humans. Task of finding humans identity can be done in various way, especially on physical characteristics, for example is by using human's portrait.

Eigenface is one of the most known method which has been used for human face recognition through humans portrait. But, this method has some limitations in discriminating ability on some aspects, such as illumination.

In this Final Project, we discuss about using Eigenface method to extract face features and using City Block as the recognition function. This human recognition system, able to recognize some change of human's face expression or some occurrence (such as wearing glasses) from the input image. The train image and image used in this system are grayscale JPG image with size 92 x 112 pixel, the face at each images consist of one face, and placed at center position.

From the result test, we found out that the increasing of brightness value at some certain level may increase the recognition accuration rate. While the accuration rate of modified image, depends on how much the image changed by modification itself.

Keywords: Eigenface, City Block, illumination, grayscale.