

CHAPTER 1

INTRODUCTION

1.1 Background

Most face detection uses eyes and mouths parameters, but most of these methods are used for images of the same size.

This research use marriage photo because the comparison between face size and the image size is relative same, the lighting in the image is relative equal.

Several research have been conducted using Freeman Chain Code to detect letters, shapes and other objects. So in this research, Freeman Chain Code algorithm is used to make it easier to get a pattern on an object so that the object can be checked for similarity with eyes and mouth data.

Several studies have been carried out that the similarity of a pattern can be determined using Consecutive Changing Characters algorithm, by doing shifting for each individual character so optimal results can be achieved. In this research, Consecutive Changing Characters algorithm is used to determine the similarity of the 2 existing patterns easier.

1.2 Scope

To avoid discussion of problems that are too broad, it is necessary to make a scope. The scope of the problems discussed in this research, are :

1. Can the Freeman Chain Code algorithm be used for eye and mouth position detection?
2. Can the Change Consecutive Characters algorithm determine the similarity of patterns of eyes and mouth with different image size ?

1.3 Objective

Produces a eyes and mouth detection program on different size of wedding photos based on eyes and mouth with skin detection, erosion, edge detection, determine the area of interest, Adaptive Freeman Chain Code algorithm, and Adaptive Changing Consecutive Characters algorithm and there is a learning process that is determined by human assistance.

