

Abstract

In the high development of information technology, important documents still remain needed and should be maintained. The letter is a major element that forms the information. In general, a letter has the form of an intact and undamaged. But sometimes there are also letters that were damaged as the intersection or noise in certain parts. Letters that were damaged will need to be improved in order to be able to be recognized again by the system or identified by the human eye.

In this final assignment have been studied a system that is able to identify letters that have intersections in certain parts. In recognition of this letter begins by inserting a printed image of capital letters. This type of data as input image data in the form of a bitmap (. bmp). In the classification process used Template Matching method. This study aims to determine whether the system is able to recognize the letters that have a particular intersection and calculate the time of the system.*

The results have been achieved is a system that can recognize the letters on the type of intersection with the vertical and horizontal accuracy of 99% with image resize 120x160 pixel, block size 10x10, and 5 as an overlap value.

Key words : *important documents, letters, intersection, Template Matching*