## **ABSTRACT**

Arabic number recognition is a process to recognize Arabic number in image form. As an image, it can be a printed or hand writing form. This program is made with Matlab.

This identification system is implemented using template matching method. The first step is preprocessing and feature extracting process. Purpose of preprocessing is to simplify the next process, and feature extraction is to get the important feature information from character image and its value is taken as a comparison data on recognition process. There are two steps on the experiment. First is learning. When image passed processing step, the result is information feature that can be saved on database. The next step is testing. It compares the input with data from the database. In this process, template matching is conducted, with finding the different from both data. Lower error, is more identical each other.

From the experiment, it reach a fairly amount with 50,7463% accurate. This result can be better if on preprocessing add some process, such as: crop to edge and binary.

Key word : Image Recognition, template matching, preprocessing, feature extracting,