

AUTOMATIC CAR PLATE RECOGNITION

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Abstract

ABSTRACT

Traffic control and vehicle owner identification has become major problem in every country. Sometimes it becomes difficult to identify vehicle owner who violates traffic rules and drives too fast.

Therefore, it is not possible to catch and punish those kinds of people because the traffic personal might not be able to retrieve vehicle number from the moving vehicle because of the speed of the vehicle.

Therefore, there is a need to develop Automatic Number Plate Recognition (ANPR) system as a one of the solutions to this problem. There are numerous ANPR systems available today.

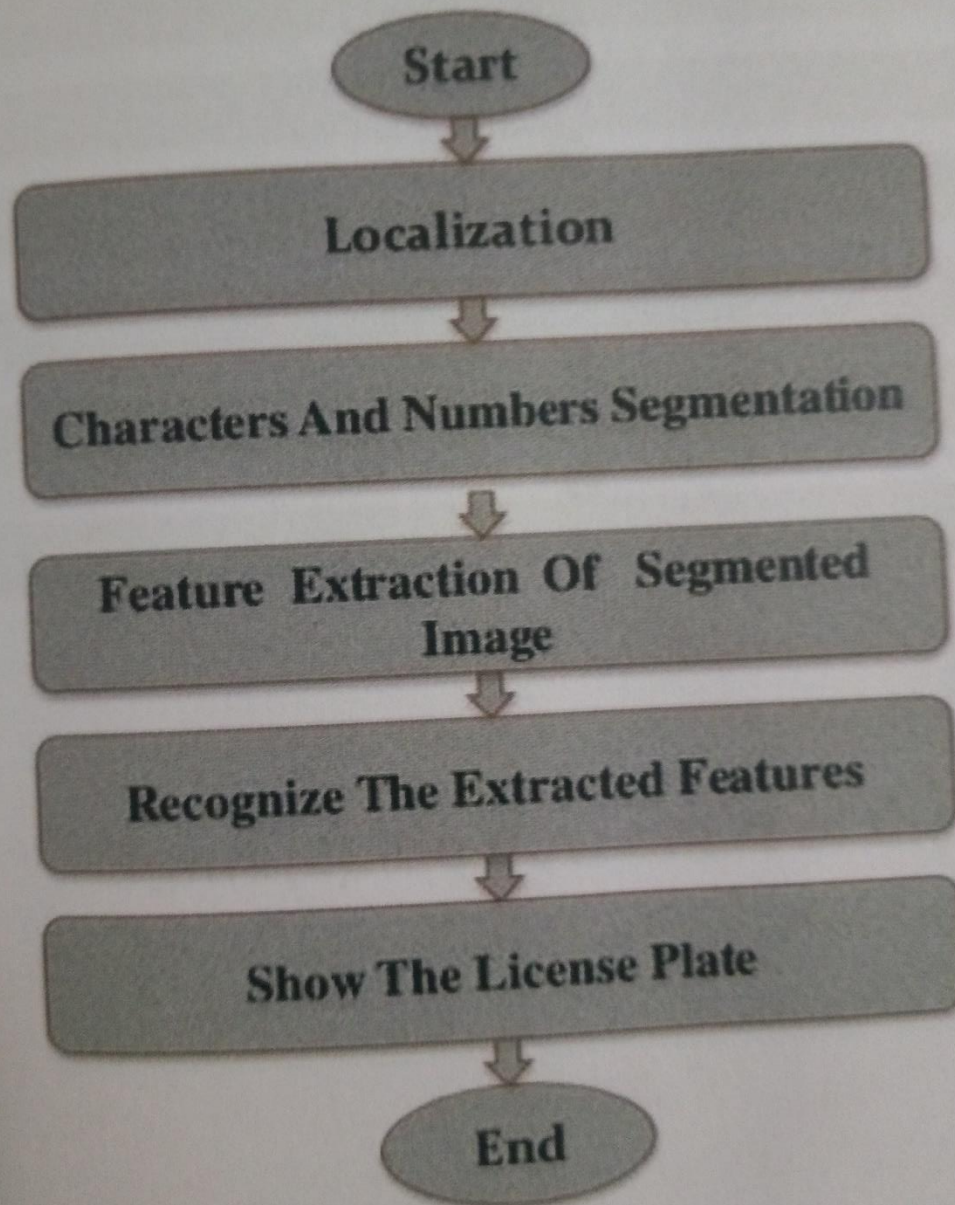
These systems are based on different methodologies but still it is really challenging task as some of the factors like high speed of vehicle, non-uniform vehicle number plate, language of vehicle number and different lighting conditions can affect a lot in the overall recognition rate.

Most of the systems work under these limitations like blurring, illumination, clearance of the plate and other factors that affect the success of the recognition of plate.

Analysis:

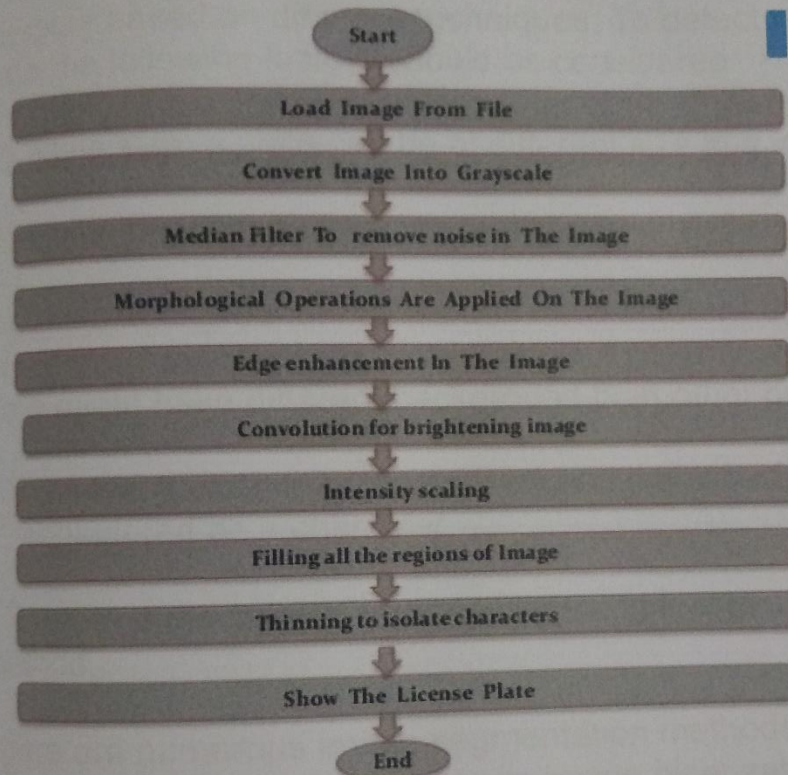
against a database in real time. The study
matlab .MATLAB is used for detection and re

Block diagram:-



Figure(1):shows the block diagram of p

A flow-chart showing the basic implementation of the algorithm in matlab:-



Figure(2):the flow chart of the project algorithm

Implementation:

3-Screens

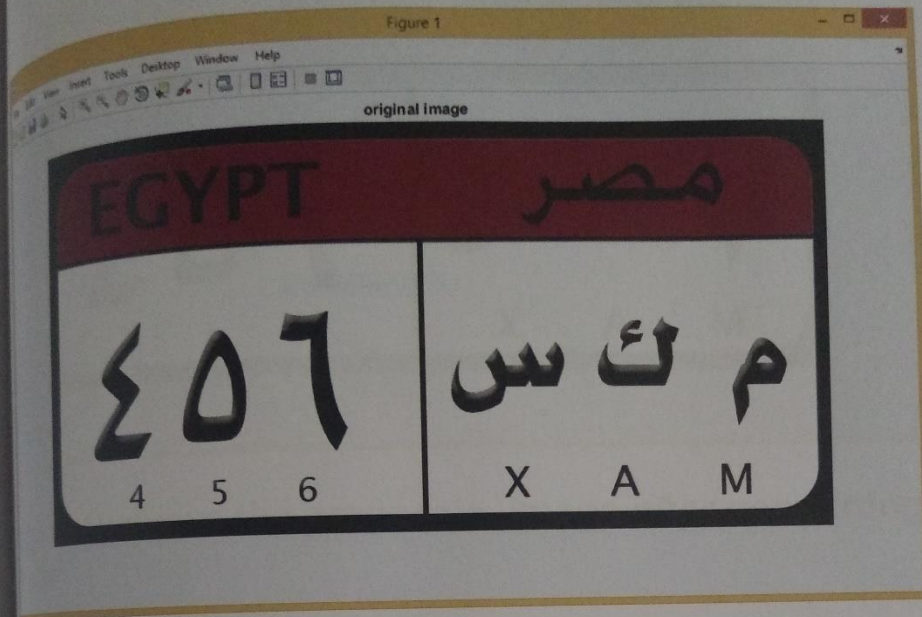


Figure (3): shows the input (original) image in RGB form

```
>> f=imread('222.png');
```

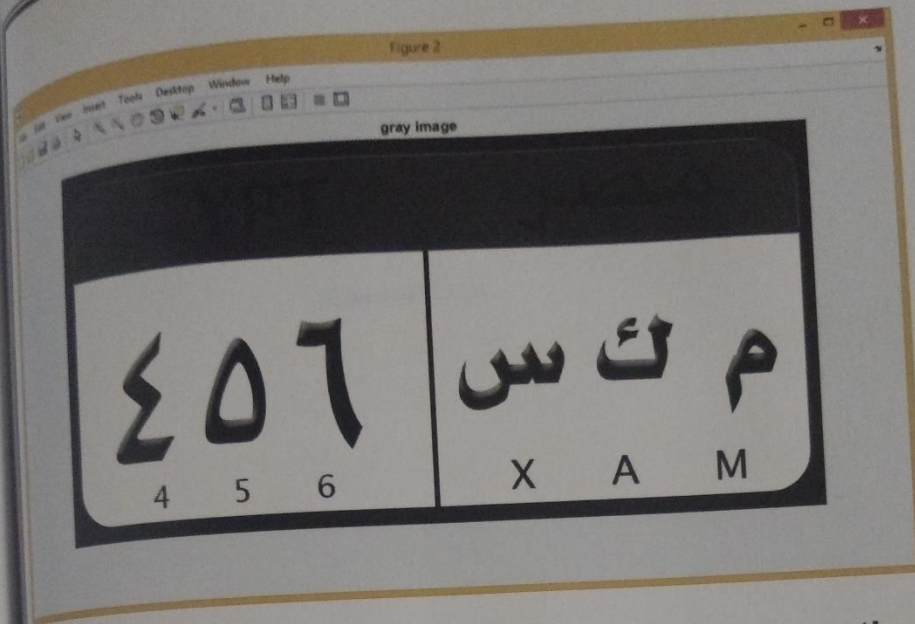


Figure (4): shows the grayscale image after converting the RGB image

```
>> g=rgb2gray(f);
```


Figure (13):shows beginning to segment the characters from the plate

٤٥٦ م ع هـ

Figure(14):shows the Arabic characters after segmentation

456XAM

Figure(15):shows the English characters after segmentation

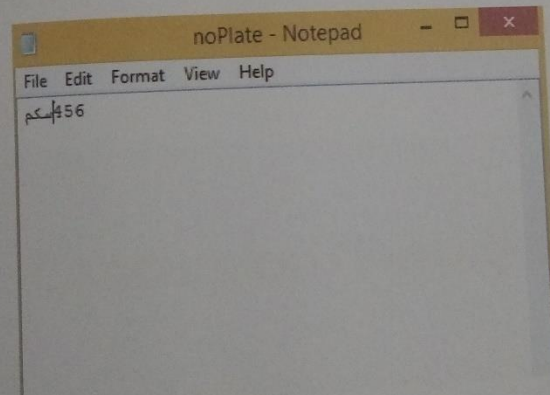


Figure 16:shows the final text file that contains letters and numbers]

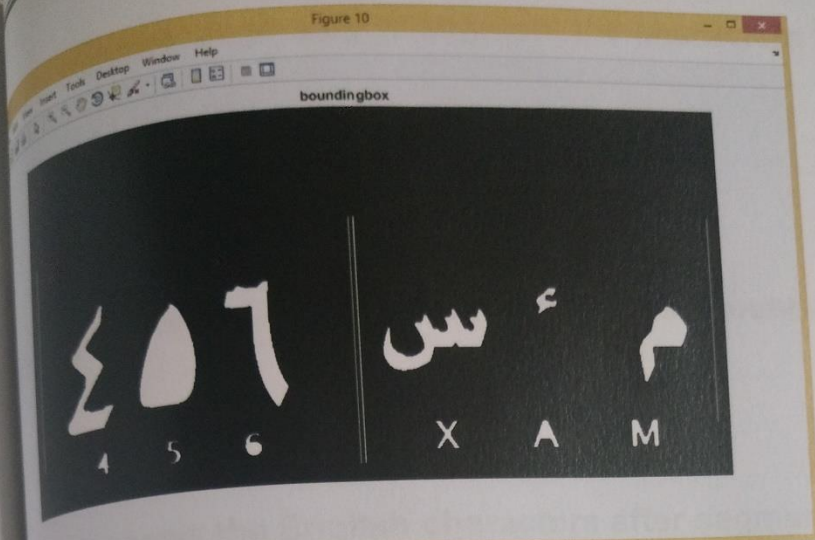


Figure (12): shows implementing the bounding box

```
final=bwareaopen(H,100);
```



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Block diagram:-



Figure(1) shows the block diagram of

