Vehicle Number Plate Recognition System

SUBMITTED BY GROUP 2 of LAB GROUP - C2

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1 Description Of Project

Number Plate Recognition system is a technology for automatically reading vehicle number plates. It is used by police forces around the world for law enforcement purposes, including to check if a vehicle is registered or licensed. It is also used for controlling traffic over the roads, Petrol Pumps, Shopping Malls, Airports, highways, toll booths, Hotels, Hospitals, Parking lots, Defense Military check points etc.

We took approach for the recognition of number plate using MATLAB Image Processing. Many a times images are noisy, different countries have different patterns for license plates. This makes the task very difficult. So it becomes very important to select proper algorithm for this purpose.

2 Description Of Dataset

In our dataset we have used number plates of different countries which have different patterns. The dataset contains images from a real life source. We used our own pictures. Dataset contains 50 images. There are two attributes in total. Alphabetic images and car images. About 17 images are from category car Images and the rest of the 23 are form Alphabetic Images. The dimension of each images are xed to 24*42 by preprocessing.

3 Methodology

Basically, we implemented the method that paper [1] proposed. Our implemented model includes three main steps:

1. localization of the plate

2. segmentation of the characters

3. detection

3.1 Flowchart

In the following flowchart we tried to show the steps of works that we have done to get the output.
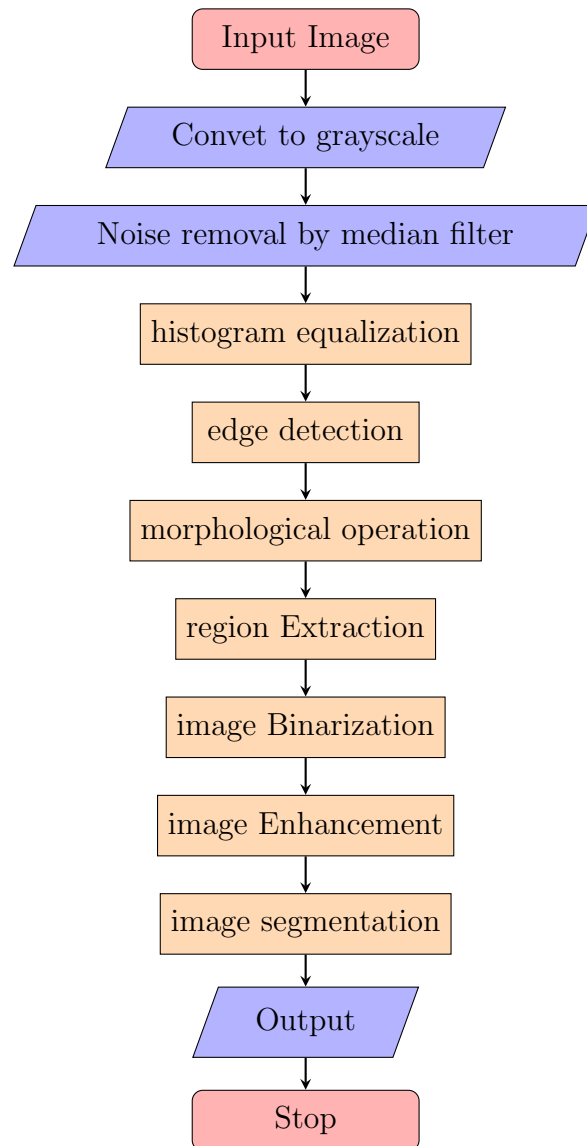

Figure 1: Flowchart

References

[1] Sourav Roy, Amitava Choudhury, Joydeep Mukherjee, An Approach towards Detection of Indian Number Plate from Vehicle. International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-2, Issue-4, March 2013.

[2] https://drive.google.com/file/d/1Eaps3M7J_xjOYFPttauhGwm2JCndX174/view?usp=sharing