IP'19 Apps Specs

Vehicle plates detection

# Description

## Main Idea

To what extent can a computer recognize Vehicle plate’s governorate? How much information can it extract from the plates? This project aims to detect the vehicle plate’s governorate in a given image and count the number of characters and numbers. In its basic form, the program should be able to extract plate from the image, and then segment this plate into a set of characters and numbers. The text can be slightly rotated.

A more advanced step can be dealing with non-uniformly illuminated images, and be able to extract the required information. Recognizing the segmented plate is also a plus.

|  |  |
| --- | --- |
| **Input** |  |
| **Output** | Number of Character: 6, Numbers=3  Governorate: Cairo  Vehicle: Taxi |

Governorate of vehicle based number count of plate:

|  |  |
| --- | --- |
| Governorate of vehicle | Plate |
| Cairo | Characters=6  Numbers=3 |
| Giza | Characters=6  Numbers=4 |
| Other governorate | Characters=7  Numbers=4 |

Type of vehicle based color of plate:

|  |  |
| --- | --- |
| Type of vehicle | Color of plate |
| Taxi | Orange |
| Government cars | gray |
| Owners cars | light blue |
| Transport | Red |