Abstract

Identification of cars is a demanding function for surveillance and control systems. People can recognize automobiles through license plates which consist of alphabets and numbers. We can use the uniqueness of a combination of characters in license plates for many purposes. For example, an arrest of a suspect's vehicle, imposing parking violation fines, and entrance authentication are possible. However, it is a labor intensive job to identify all passing or parked vehicles' license plates.

This paper presents a training based approach for the recognition of vehicle number plate. The whole process has been divided into three stages i.e. capturing the image, plate localization and recognition of digits over the plate. HOG features have been used for the training purpose and Support Vector Machine is employed for the classification purpose yielding in more than 99% accuracy while recognition. The algorithm has been tested over more than 100 images.

References
A Machine Learning Algorithm for Automatic Number Plate Recognition


Index Terms

Computer Science

Pattern Recognition

Keywords

ANPR, SVM, HOG Features, Character Recognition.