An Automatic Number Plate Recognition of Bangladeshi Vehicles

Volume 93 - Number 15
Year of Publication: 2014

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10.5120/16293-5999

Abstract

Now-a-day, the importance of automatic traffic monitoring has drawn the attention to the intelligent transport systems. A number plate is the unique identification of a vehicle. Automatic Number Plate Recognition (ANPR) is designed to locate and recognize the number plate of a moving vehicle automatically. For Bangladeshi Vehicles there are no fixed rules for number plates like other countries. Because of the variety of conditions and patterns, the recognition process of number plates for Bangladeshi vehicles is so difficult. We develop a ANPR system which is divided into three part such as number plate Localization, Extraction and Recognition. After successfully complete localization and extraction of number plate we send that portion to a Bangla OCR to fetch the text of the number plate for further processing. In this paper we present a complete ANPR system for Bangladesh Vehicles using standard algorithms with some customization and with our own algorithm for Number Plate extraction which can detect Number Plate region and successfully extract detected region and then able to recognize that number plate text.

Refer
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Index Terms

Computer Science  Automated Systems

Keywords

ANPR; Sobel Operator; Otsu threshold; Hough transform; Bangladeshi vehicles number plate