An Efficient Technique to Locate Number Plate using Morphological Edge Detection and Character Matching Algorithm

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Abstract

This paper describes an efficient technique of locating and extracting license plate and recognizing each segmented character. The proposed model can be subdivided into four parts—Digitization of image, Edge Detection, Separation of characters and Template Matching. In this work, we propose a method which is based on morphological operations where different Structuring Elements (SE) are used to maximally eliminate non-plate region and enhance plate region. Character segmentation is done using Connected Component Analysis. Correlation based template matching technique is used for recognition of characters. This system is implemented using MATLAB7.4.0. The proposed system is mainly applicable to Indian License Plates.

References

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Halina Kwasnicka and Bartosz Wawrzyniak, "License Plate Localization and Recognition in Camera Pictures," Faculty Division of Computer Science, Wroclaw University of Technology, Artificial Intelligence Methods, November 13-15, 2002, Gliwice, Poland


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2013.

Index Terms

Computer Science

Algorithms

Keywords

License plate  Edge Detection  Character Segmentation  Connected Component  Template

Analysis  Matching