METODA ZA PREPOZNAVANJE ZNAKOVA S
REGISTARSKIH OZNAKA AUTOMOBILA

Diplomski rad

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SAŽETAK


Slika segmentirane registarske oznake šalje se algoritmu za segmentaciju znakova. Segmentirani znakovi spremaju se u unaprijed definirano polje, te se šalju algoritmu za optičko prepoznavanje znakova. Znakovi se prepoznavanju s obzirom na strukturne značajke znaka kao što u broj i položaj petlji u znaku. Algoritmom je postignuta uspješnost izvođenja od 90,38% uz prosječno vrijeme izvršavanja od 1,458 sekunde.

Ključne riječi: Segmentacija registarske oznake, binarizacija, segmentacija znakova, optičko prepoznavanje znakova, strukturalne značajke
Method For Optical Character Recognition Based on Character's Structural Features

This paper describes the development of three algorithms. The first algorithm is used for license plate segmentation from the color image of the vehicle. The algorithm is divided into three main processes. The first process carries out the pre-processing of the input image. The next process carries out the Threshold using the Otsu method. The last process does the morphological processing of the binary image.

The segmented license plate is sent as parameter to the character segmentation algorithm. Segmented characters are saved in the pre-defined array and then sent as a parameter to the optical character recognition algorithm. The algorithm recognizes characters based on their structural features like the number and position of loops in the character. The algorithm achieves a success rate of 90.38% with an average execution time of 1.453 seconds.

**Keywords:** License plate segmentation, binarization, character segmentation, optical character recognition, structural features