

短文

基于分块思想的汽车牌照定位算法研究

苑玮琦, 张亮

沈阳工业大学视觉检测技术研究所 沈阳 110023

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摘要

改进了基于分块思想的汽车牌照定位算法. 首先将图像等分成若干个子图像, 利用子图像内车牌水平边缘密度的聚集程度分割图像, 保留可能的车牌区域, 并进行区域合并. 由于车牌中号码基本均匀分布, 其号码边缘所占有的面积与整个牌照面积的比例在一定范围内, 对于牌照区域内的子图像也会具有同样的比例. 当采集距离造成牌照尺寸发生变化时, 其比例值会仍在设定的范围内, 可适应车牌大小不同的情况, 同时, 由于以块方式搜索, 速度明显加快.

关键词 [车牌定位](#) [分块搜索](#) [边缘密度](#) [自适应定位](#)

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An Improved Vehicle Plate Location Method Based on Block Segmentation

YUAN Wei-Qi, ZHANG Liang

Computer Vision Group, Shenyang University of Technology, Shenyang 110023

Abstract

An improved location algorithm of the vehicle plate is proposed in the paper. Firstly, the plate image is segmented into many blocks. Then the horizontal density of character edge in each block is used to obtain the candidate plate region. Since the characters in plate are uniformly distributed basically, the proportion of the area being occupied by character edge to the whole plate will be in some range. Likewise, there is the same proportional relation for every sub-region in the whole plate region. When the change of the image catching distance brings on the change of plate size, the ratio is still in the above range, and is suited to the plate of the different size. Meanwhile, because the plate position is located by the block searching, the location speed increases evidently. The experimental results show that the proposed algorithm has high accuracy and robustness.

Key words [Plate location](#) [block segmentation](#) [edge density](#) [adaptive location](#)

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通讯作者 yuan60@126.com

作者个人主页 苑玮琦; 张亮

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