

عنوان مقاله:

A Pixon-based Image Segmentation Method Considering Textural Characteristics of Image

محل انتشار:

مجله هوش مصنوعی و داده کاوی، دوره 7، شماره 1 (سال: 1398)

تعداد صفحات اصل مقاله: 8

نویسنده:

M. H. Khosravi - Faculty of Electrical and Computer Engineering, University of Birjand, Birjand, Iran

خلاصه مقاله:

Image segmentation is an essential and critical process in image processing and pattern recognition. In this paper we proposed a textured-based method to segment an input image into regions. In our method an entropy-based textured map of image is extracted, followed by an histogram equalization step to discriminate different regions. Then with the aim of eliminating unnecessary details and achieving more robustness against unwanted noises, a low-pass filtering technique is successfully used to smooth the image. As the next step, the appropriate pixons are extracted and delivered to a fuzzy c-mean clustering stage to obtain the final image segments. The results of applying the proposed method on several different images indicate its better performance in image segmentation compared to the other methods.

کلمات کلیدی:

Image segmentation, image texture, pixon

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