

عنوان مقاله:

Multi-focus image fusion in DCT domain based on correlation coefficient

محل انتشار:

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خلاصه مقاله:

Multi-focus image fusion is used to collect useful and necessary information from input images with different focus depths in order to create an output image that ideally has all information from input images. In this article, an efficient, new and simple method is proposed for multi-focus image fusion which is based on correlation coefficient calculation in the discrete cosine transform (DCT) domain. Image fusion algorithms which are based on DCT are very appropriate, and they consume less time and energy, especially when JPEG images are used in visual sensor networks (VSN). The proposed method evaluates the amount of changes of the input multi-focus images when they pass through a low pass filter, and then selects the block which has been changed more. In order to assess the algorithm performance, a lot of pair multi-focused images which are coded as JPEG were used. The results show that the output image quality is better than that of the previous methods

کلمات کلیدی:

multi-focus image; image fusion; DCT domain; correlation coefficient; VSN

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