

عنوان مقاله:

Image Backlight Compensation Using Recurrent Functional Neural Fuzzy Networks Based on Modified Differential Evolution

محل انتشار:

مجله سیستم های فازی، دوره 13، شماره 6 (سال: 1395)

تعداد صفحات اصل مقاله: 19

نویسندگان:

Sheng-Chih Yang - *Department of Computer Science and Information Engineering, National Chin-Yi University of Technology, Taichung City 411, Taiwan, ROC*

Cheng-Jian Lin - *Department of Computer Science and Information Engineering, National Chin-Yi University of Technology, Taichung City 411, Taiwan, ROC*

Hsueh-Yi Lin - *Department of Computer Science and Information Engineering, National Chin-Yi University of Technology, Taichung City 411, Taiwan, ROC*

Jyun-Guo Wang - *Department of Computer Science and Information Engineering, National Chin-Yi University of Technology, Taichung City 411, Taiwan, ROC*

Cheng-Yi Yu - *Department of Computer Science and Information Engineering, National Chin-Yi University of Technology, Taichung City 411, Taiwan, ROC*

خلاصه مقاله:

In this study, an image backlight compensation method using adaptive luminance modification is proposed for efficiently obtaining clear images. The proposed method combines the fuzzy C-means clustering method, a recurrent functional neural fuzzy network (RFNFN), and a modified differential evolution. The proposed RFNFN is based on the two backlight factors that can accurately detect the compensation degree. According to the backlight level, the compensation curve function of a backlight image can be adaptively adjusted. In our experiments, six backlight images are used to verify the performance of proposed method. Experimental results demonstrate that the proposed method performs well in backlight problems.

کلمات کلیدی:

Neural fuzzy network, Recurrent network, Differential evolution, Fuzzy c-means, Backlight compensation, Contrast enhancement

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