



A BLIND ASSESSMENT METHOD OF IMAGE COMPRESSION QUALITY BASED ON IMAGE VARIANCE

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Submitted: July 29, 2015

Accepted: Jan. 18, 2016

Published: Dec. 1, 2016

Abstract- The assessment of image compression result can not only evaluate the quality of image compression results and to a certain extent, can also find the advantages and drawbacks of various compression methods. At the same time, it can provide a reference for the compressed image restoration. Firstly, the classification and shortages of image quality assessment methods are presented. Then, several objective assessment methods usually used for image compression quality are introduced and the recent research progresses are shown. Finally, in view of the shortages of traditional image assessment methods and the existing blind assessment methods, based on image invariance, we propose a blind assessment method of image compression quality by considering the edge detail recovery and artifact removing. Compared with the traditional blind assessment methods, our method is simple in form and evaluation system is easily implemented. The experimental results also show that it is reasonable and effective.

Index terms: Image compression; quality assessment; objective assessment; blind assessment; image variance.