A Study of Reduction Ringing Artifacts in JPEG2000

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ABSTRACT

ABSTRACT Lossy compression technique will produce different ringing artifacts. Just under one time of different compression rates, the ones that appear look the number of degree on the vision of effect false. It is the higher as compressing one time of rates will be obvious the false feeling which looks like the effect that appears. From changing early into JPEG image of the foundation with dispersed cosine, change into JPEG2000 on the foundation with the small wave till now, will produce different looking the effect false. JPEG will form the square effect, JPEG2000 will cause the ripples to pretend to look like, dealing with and back treatment technique before common treatment way can divide into. We proposed two methods in this thesis. Detect and examine the image edge first before one does not need to deal with again. The first method can reduction ringing artifact without edge detection. And then in order to deal with the datum in accordance with the image edge measured detected, Compression image after dealing with through the method that we proposed. The vision effect of the compression picture which processed by the method we designed can be improved obviously.

Keywords : ringing artifact ; wavelet ; JPEG2000 ; postprocessing ; edge detection

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