A Study of Near Lossless and Lossless Image Coding

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ABSTRACT

In the paper, there are two main sections. One is that in lossy coding we come up with a Multilevel of Large Block Size method of simple edge detection and combine it with traditional AMBTC. Through the result acquired from our experiment, we know that at the same bit rates the method with edge detection can substantially achieve higher image quality than AMBTC. The other is that in near lossless and lossless coding we provide a novel method which can effectively reduce no-negative sequence generated by differential pulse code modulation. Besides, we suggest another prediction coding different from that of JPEG-LS. In our experiment, we discovered that the method we proposed has better performance in differential pulse code modulation than fixed predictor in JPEG-LS.

Keywords : AMBTC ;   ; JPEG-LS

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