# IMAGE SEGMENTATION IN THE JPEG2000 DOMAIN

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## Abstract

This paper presents a simple method to segment JPEG2000 images based on the features extracted from the MQ table such that the burden of decompressing computations can be avoided. The feature vectors are segmented by using the modified CTM algorithm. In which, a rate-distortion based scheme is proposed to determine the parameter $\varepsilon$ of CTM in an adaptive manner. Experimental results show that the modified CTM algorithm with the MQ table based features is suitable for JPEG2000 image segmentation. In addition, the segmentation results even at low-middle bpp rates are satisfactory, which is advantageous to the communication applications.

Keyword：JPEG2000; wavelet; image segmentation; MQ table; CTM