QUALITY ESTIMATION IN WAVELET IMAGE CODING (WedAmOR3)

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✱ Abstract :

The wavelet transform is a very powerful tool for image coding for which the quality of the compression is depending on the choice of the filter banks associated to the wavelet. These filters can be characterized by two indices: a spatial index related to their significant support and a frequency index related to their aliasing. This work explores the connection between a quality criteria and these two indices for a given image family. Tow useful applications are presented: in the first one a neural network allows us to deduce the best filter bank for a given image. In the second one a quality criterion for a new image is estimated knowing the filter bank.

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