

The selection of subbands for wavelet packet splitting can be explored with graph cut methods for better and adaptive texture gradient.

The texture gradient was based purely on the basis of the wavelet coefficient magnitudes and its discontinuity. Phase discontinuities are also important for identifying texture boundaries. Therefore a combination of measures could be investigated for better texture gradient.

The marker image determines the quality of the final segmentation to a large extent. As stated earlier, the *minsize* parameter in the marker image creation algorithm is the key parameter for successful segmentation of natural images. Automatic generation of the minimum region size tuned to the information content of the image will help in better segmentation. Moreover an intelligent evaluation of the marker regions created will provide a better marker image.

Post processing through methods such as selective region merging will enhance the quality of the segmented results.

There are a number of important possible further developments to the above marker selection and texture gradient methods.

Key References

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