Abstract

The image retrieval problem has recently become more important and necessary because of the rapid growth of multimedia databases and digital libraries. Different search engines use different features to retrieve images from the database. In this paper, the Contourlet Transform is developed to retrieve similar images from the image database. By combining the Laplacian
Image Retrieval using Contourlet Transform

pyramid and the Directional Filter Bank (DFB), a new image representation is obtained. The
direction subbands coefficients are used to form a feature vector for classification. The
performance of the Contourlet Transform is evaluated using standard bench marks such as
Precision and Recall. An experiment shows that the Contourlet Transform (CT) features provide
the best results in Image Retrieval.

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Index Terms

Computer Science

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Key words

Content Based Image Retrieval (CBIR)
Contourlet Transform (CT)

Laplacian Pyramid (LP)

Directional Filter Bank (DFB)