This paper presents the idea of using sal cal density distribution in complex Walsh transform sectors to generate the feature vector for content-based image retrieval. This paper compares the performance of 8, 12, and 16 sectors of Walsh Transform. The density distribution of real (sal) and imaginary (cal) values of Walsh sectors in all three color planes are considered to design the feature vector. The algorithm proposed here is worked over a database of 270 images spread over 11 different classes. The Euclidean distance is used as a similarity measure. Overall average precision and recall is calculated for the performance evaluation and comparison of 8, 12, & 16 Walsh sectors. The overall average of cross-over points of precision and recall is of all methods are compared.

Reference

- Anil Jain, Arun Ross, Salil Prabhakar, “Fingerprint matching using minutiae and texture
Density Distribution in Walsh Transform Sectors as Feature Vectors for Image Retrieval


**Index Terms**

Computer Science  
Biometric Security

**Key words**

CBIR  
Walsh Transform  
Euclidian Distance  
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