Abstract

Content based image retrieval is the technique to retrieve similar images from a database that are visually similar to a given query image. It is an active and emerging research field in computer vision. In our proposed system, the Interest points based Histogram of Oriented Gradients (HOG) feature descriptor is used to retrieve the relevant images from the database. The dimensionality of the HOG feature vector is reduced by Principle Component analysis.
(PCA). To improve the retrieval accuracy of the system the Colour Moments along with HOG feature descriptor are used in this system. The Interest points are detected using the Harris-corner detector in order to extract the image features. The KD-tree is used for matching and indexing the features of the query image with the database images.

Reference

- L. Huston Y. Ke, R. Sukthankar, “Efficient near-duplicate detection and sub-image

Index Terms

Computer Science
Information Retrieval

Key words

Content-based image retrieval interest points
HOG

KD-tree