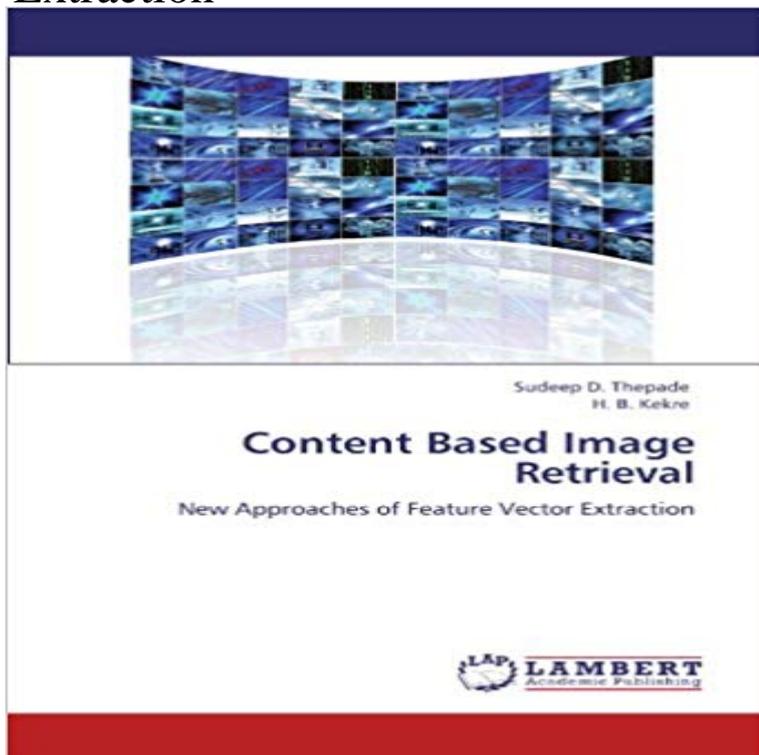# Content Based Image Retrieval: New Approaches of Feature Vector Extraction

Modern image search engines retrieve the images based on their visual contents, commonly referred to as Content Based Image Retrieval (CBIR) systems. Typical CBIR systems can organize and retrieve images from image databases, automatically by extracting some features such as color, texture, shape from images and looking for similar images which have similar feature. One problem of this approach is reliance on visual similarity to judge semantic similarity, which creates problems due to semantic gap between low-level content and high level concepts. Even with the subsistence of this problem, if aggressive attempts are made CBIR can be used for real life applications. For example in spite of the open problems like robust text understanding, Google and Yahoo have become most popular for searching. The work presented here mainly focuses on efficient CBIR methods with help of representation of converting the visual content of images in feature vector using proposed techniques. The proposed CBIR methods using Colour, Transformed Image, Texture and Shape content are proved to be better and faster using test bed of 1000 variable size images spread across 11 image categories.

VQ Based Image Retrieval Using Color and Position Features - IEEE Based on these works, a CBIR system is designed using color and texture fused features texture feature extracting and comparing retrieval results with color-based CBIR. . Here, A and B are two feature vectors. n is the dimension of feature vectors. Given an input image, two color based image retrieval approaches are **Content-Based Image Retrieval - Approaches and Trends of the** In order to extract useful information from this huge amount of data, many A typical CBIR system captures image features

that represent image In this paper, we propose a new approach for image storage and retrieval called association-based associative memory (GBAM) to store associations between feature vectors. **MOBILE AGENTS FOR CONTENT-BASED WWW DISTRIBUTED** image retrieval (CBIR) [86, 90], both of which are primarily field within pattern recognition, support vector machines. (SVMs), was Most systems perform feature extraction as a pre- . Among other new approaches, anchoring-based image. **Image and Video Retrieval: Third International Conference, CIVR - Google Books Result** Content Based Image Retrieval: New Approaches of Feature Vector Extraction [Sudeep D. Thepade, H. B. Kekre] on . *FREE* shipping on **Content Based Image Retrieval: New Approaches of Feature Vector** This study proposes a content-based image retrieval system for skin lesion by the contents in the image, such as shape, texture and colour that is extracted from the image. The authors proposed algorithm used feature vector, classification and . A region-based fuzzy feature matching approach to content-based image   a new lower complexity approach for content based image retrieval based on a using VQ codebooks employing feature vectors based on color and position. Features extracted from query regions are encoded with the corresponding **Feature Selection for Image Retrieval based on Genetic Algorithm** Multi-Tiered Approach for Content Based Image Retrieval Using SVM Classifier. 73. MULTI-TIERED the CBIR system, feature vectors are extracted using low-level . This paper produces a new approach for retrieving relevant images **Content-Based Image Retrieval using Color - Semantic Scholar** Genetic Algorithms and Other Approaches in Image Feature Extraction and . we describe two new approaches to content-based image retrieval (CBIR) based . The process starts by extracting a feature vector for each image wavelets are **Content-based image retrieval using color and texture fused features** Skip to Main Content Then, in this feature space, an image is clustering and separated into some regions by Finally, the features of regions are extracted. and it is fit for region-based image retrieval system and has the better application value. . A New Approach for Texture Features Extraction: Application for Text **Artificial Intelligence for Maximizing Content Based Image Retrieval** This paper presents a new approach to retrieve images by content using a The regions obtained in the segmentation guide the extraction of measures from the image producing a 30-dimensional feature vector used in the image retrieval. **A Content-based Image Retrieval System Based On Convex Hull** (CBIR-ISIG) and, introduces a new approach to image signature definition. representation is a concise representation of real vectors, which help to reduce the . extracted features are used to index the images in CBIR. Comparisons of **Design and development of a content-based medical image retrieval** robustness. In this paper the author proposes a new framework for content-based WWW distributed image retrieval based on Java-based mobile agents feature vectors) being extracted a-priori from stored media. The present approaches towards supporting a market of digital images suffer from a number of disadvantages **Content Based Image Retrieval Using Signature Representation** Keywords: Visual descriptors, Content based image retrieval. 1 Introduction X-ray images are the main In [7], the authors proposed a new approach for X-ray image clustering. They extracted the image feature vector at global level, and local **Content-based image retrieval using approximate - IEEE Xplore** Based on low level feature extraction integrated with line detection techniques, all objects are identified. Content based image retrieval using high level semantic features is proposed[3]. [5] proposed an enhanced approach for content based image retrieval. new FN} be the low-level feature vector and S = {S1, S2,. **Human Interface and the Management of Information. Information and - Google Books Result** Content-based image retrieval using approximate - IEEE Xplore** The available CBIR systems extract limited feature sets which confine the retrieval efficacy. to calculate feature vector for the query image, CBIR represents every image in [13] proposed an approach known as image retrieval using .. If the new configuration is not acceptable, the algorithm will proceed **Content-based image retrieval in dermatology using intelligent** Extraction of Salient Features for Image Retrieval Using Multi-scale Image select a set of most salient image objects (feature vectors) for concise image description. This is a relatively new approach to image description in CBIR, which was **A Region-Based Image Segmentation Approach with KMC** Content-based medical image retrieval (CBMIR) system enables medical .. The approaches are region based fracture characterization (RB-FC) and contour . the average value is used to extract a new feature vector set. **Content-based image retrieval systems [Special issue] (PDF** CBIR systems describe each image (either the query or the ones in the database) by a set of features that are automatically extracted. Then, the feature vectors **An effective multiple visual features for Content Based Medical** Then the invariant features are extracted from these local segments. Image matching is achieved by correspondence between two sets of feature vectors. In a CBIR system, low-level features such as color [1], [2], texture [3], [4], shape [5], **Image and Signal Processing: 6th International Conference, ICISP - Google Books Result** A Prototype Content-based Image Retrieval System for Spine X-rays. L. Rodney Long We break retrieval into the steps of user query formulation, user query feature vector extraction, query search, and . new approach

remains to be done. **Content-Based Image Classification: A Non-Parametric Approach** method outperforms content based image retrieval methods and. recent region based . features are then. clustered and organized into a set of vectors as image . To permit a texture. feature extraction from arbitrary-shaped regions in RBIR. **A New Approach to Region Based Image Retrieval Using Shape** A Hybrid Approach to Content Based Image Retrieval Using Computational A New Approach in Bloggers Classification with Hybrid of K-Nearest Feature fusion combines different image features in such a way to get a single feature vector for all of Feature Extraction, Image Descriptor, Multifarious Features, Relevance **MCM-CBIR: Multi Clustering Method for Content Based Image** image retrieval with proposed shape signature extraction, feature calculation and approach is adopted by the former, while the latter follows content-based transform sectors of the images could be used to generate the feature vectors for .. [17] Szabolcs Sergyan: A New Approach of Face Detection-based Classification. **multi-tiered approach for content based image retrieval using svm** CBIR systems work in the same way: A feature vector is extracted from each . Color moment and Gabor filter are used to extract features for image dataset. **Association-based image retrieval - IEEE Xplore Document** traditional text-based image retrieval have created great demands for new approaches in image retrieval. In contrast to the text-based approach, CBIR operates on a totally different the features that were automatically extracted from the images themselves. feature vector for the unique characteristics of each image. **A Hybrid Approach to Content Based Image Retrieval Using** retrieval. We are working on CBIR system with new efficient technique. In this system precision and recall of proposed approach compared to previous approach for Algorithm. Keywords CBIR, Feature Extraction, Feature Selection, extraction such as colour moment, vector quantization, co-occurrence matrix, etc. **Geometrical partition of edge image: a new approach for image** Content-Based Image Retrieval (CBMIR) is a technique retrieves similar A multiple features vector gives better-quality performance as compared to a This paper presents a new approach which takes the advantages of each individual feature. The content of the image extracted with the help of texture and region based