Abstract

Recently, very large collections of images and videos have grown rapidly. In parallel with this growth, content-based retrieval and querying the indexed collections are required to access visual information. Three main components of the visual information are color, texture and shape. In this paper, a selective region based content-based image retrieval system is presented that combines two visual descriptors of images and measures similarity of images by applying a SVM Classification. Here, the selective region matching with Region of Interest and SVM classification based CBIR retrieval system for imaging is presented in order to provide better image classification and fast image retrieval. In the proposed method the color and texture features like contrast, mean, standard deviation, energy and entropy are extracted from the image. Also it is shown through experimental results and analysis of retrieval effectiveness of querying that the content-based retrieval system is effective in terms of retrieval and scalability.

References


Images on OPEN CV Environment”, (ICDCCom)2014 International Conference on Devices, Circuits and Communications, Pages 1—6, September 2014,DOI: 10.1109/ICDCCom.2014.7024695

Index Terms

Computer Science
Image Processing

Keywords

Content-Based Image Retrieval (CBIR), Support Vector Machine (SVM), Color Moments, Texture.