Abstract

Today content-based image retrieval (CBIR) has become one of the most active areas of research in computer vision. With rapid advances in digital imaging modalities, the use of CBIR to search for the clinically relevant and visually similar medical images is highly felt nowadays. This paper proposes a system for content based image retrieval of X-ray images. The six classes of X-ray images used for this work are from the IRMA ImageCLEFmed 2008 database. Discrete Cosine Transform (DCT) coefficients were used as features and the X-rays were classified using Support Vector Machine (SVM). The classified images along with the features were stored in the database using hierarchical index structure. Euclidean distance is used as the metric for retrieving the top three images from the database relevant to the given query image.
Automatic categorization of medical images for content-based retrieval and data mining.
- Principal component analysis: www. fon. hum. uva.nl/praat/manual/principal_component_analysis. html
- Fesharaki, Nooshin Jafari, and Hossein Pourghassem. &quot;Medical X-ray Images Classification Based on Shape Features and Bayesian Rule. &quot; In Computational Intelligence and Communication Networks (CICN), 2012 Fourth International Conference on, pp. 369-373. IEEE, 2012.

Index Terms

Computer Science
Image Processing
Keywords