

OPTIMIZED CONTENT BASED IMAGE RETRIEVAL USING GENETIC ALGORITHM WITH RELEVANCE FEEDBACK TECHNIQUE

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ABSTRACT

Rapid growth for storing and capturing multimedia data with digital devices, in recent years, information of multimedia retrieval has one of the most important researches and key challenging problems with image retrieval.

Thus, Content-Based Image Retrieval (CBIR) is used that deals with retrieval of similar images from a large database for a given input query image. A large number of diverse methods have been proposed for CBIR using low level image content like edge, color and texture. For combination of different types of content, there is a need to train these features with different weights to achieve good results.

Thus, in this paper proposes an image extractor method using genetic algorithm on multi-feature similarity synthesis. Subsequently, Genetic Algorithm-based similarity measure is performed between the query image features and the database image features. In retrieving process of most of the CBIR systems do not have potential to efficiently allied with human perception. Hence to overcome this problem in this paper we are extending this genetic algorithm based method by using relevance feedback methods to magnify retrieval performance. Also this Relevance feedback technique is helpful to trim semantic gap. We will use here both implicit and explicit feedback technique along with genetic algorithm.

KEYWORDS: CBIR, Image Retrieval (IR), Relevance Feedback (RF), Genetic Algorithm (GA)