An Overview on Image Indexing: A Picture is worth a Thousand Words

Morteza Kokabi
Professor of KIS, Shahid Chamran University
kokabi80@yahoo.com

Saleh Rahimi (Corresponding author)
PhD Student of KIS, Shahid Chamran University
rahimi1417@gmail.com

Farideh Osareh
Professor of KIS, Shahid Chamran University
osareh.f@gmail.com

Alireza Noruzi
Faculty member of KIS, University of Tehran
nouruzi@gmail.com

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Abstract

Purpose: This paper presents various image indexing techniques and discusses their advantages and limitations.
Methodology: conducting a review of the literature review, it identifies three main image indexing techniques, namely concept-based image indexing, content-based image indexing and folksonomy. It then describes each technique.
Findings: Concept-based image indexing is text-based. It allows users posting their query, using keywords. The and content-based image indexing is pixel-based. It allows users posting their query based on colour, texture, shape, etc. Images have more semantic features and layers, as a result indexing for images is more complex comparing to texts. That is why indexing a text differs from indexing an image.
Originality/value: This article reviews the conceptual framework of image indexing and retrieval and gives a comprehensive view about this sphere by collecting a relatively complete literature about it. This consolidated review can help us to get a right view about image indexing and retrieval.
Keywords: Image indexing, image storing and retrieval, Concept-based Image Indexing, Content-based Image Indexing, Folksonomy.

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