Abstract

This paper attempts to provide a comprehensive review and characterize the problem of the semantic gap that is the key problem of content-based image retrieval and the current attempts in high-level semantic-based image retrieval being made to bridge it. Major recent publications are included in this review covering different aspects of the research in the area of high-level semantic features. In this paper the different methods of image retrieval systems are described and major categories of the state-of-the-art techniques in narrowing down the ‘semantic gap’ are presented. Finally, based on existing technologies and the demand from real-world applications, a few promising future research directions are suggested.

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Index Terms

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Keywords

Semantic Gap   Image Retrieval   Automatic Annotation and Ontology.