A GENERALIZED CATEGORIZATION OF MEDICAL IMAGES FOR CONTENT BASED, REGION BASED DATABASE RETRIEVAL AND DATAMINING

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Abstract

Content-based image retrieval (CBIR) has been one of the most vivid research areas in the field of computer vision over the last 10 years. The availability of the large and steadily growing amounts of visual and multimedia data. In this paper, a multi-level image representation model is developed and used to mine the feature hidden in the original remote sensing image. This model is consisted in three levels: region level, region feature level and semantic level. The first two levels aim at represent image content by using region feature. Semantic level aims at extracting hidden semantic feature. Efficient content-based medical image retrieval and data mining in the medical domain is still a challenging aspect to increasing the overall search capabilities and tools available for radiologists. CBIR is the integration of content-based access methods into Picture Achieving and Communication Systems (PACS), and the substantial progress has been made over the last years. This also identifies explanations to some of the outlined problems in the field as it looks like many propositions for systems are made from the medical domain and research prototypes are developed in computer science departments using medical datasets.

Keywords: CBIR, Medical images, PACS, Image retrieval, Data mining.