

论文

基于区域色彩纹理特征描述和DPF匹配的图像检索

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收稿日期 2006-10-18 修回日期 2007-6-7 网络版发布日期 2008-7-15 接受日期

摘要

该文给出了一种彩色图像检索的新方法。在特征描述时,首先划分连通区域,进而求取勒让德色度矩和纹理共生矩阵,获取区域的色彩和纹理特征(Regional Color and Texture, RCT);在相似度匹配时,将动态局部距离函数(Dynamic Partial distance Function, DPF)应用到动态区域匹配中。实验结果显示,该RCT-DPF方法对彩色图像检索是有效的,并且优于纹理共生矩阵、基于色彩连通的图像纹理检索方法和非DPF区域匹配的多特征描述方法。

关键词 [区域色彩纹理-动态局部距离函数](#) [勒让德色度矩](#) [纹理共生矩阵](#) [加权DPF匹配](#)

分类号 [TP391](#)

Image Retrieval Based on Regional Color-Texture Features Description and DPF Matching

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Abstract

A new method for color image retrieval is introduced in this paper. At first, the image is parted into some connected regions. Rational Legendre chromaticity distribution moments and texture co-occurrence matrices are computed to represent the color and texture features (Regional Color Texture: RCT). Then, Dynamic Partial distance Function (DPF) and dynamic regions matching are used to weight RCT features, for short RCT-DPF. Experimental results indicate that this method RCT-DPF has good performance in image retrieval. To compare with Texture Co-occurrence Matrices(TCM), Multi-component Co-occurrence Matrices(MCM) and RCT, RCT-DPF is better precision.

Key words [Regional Color Texture-Dynamic Partial distance Function \(RCT-DPF\)](#) [Legendre chromaticity distribution moments](#) [Texture co-occurrence matrices](#) [DPF matching](#)

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