论文

一种基于KL变换的椭圆模型肤色检测方法

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摘要
肤色检测是计算机视觉中的一个重要问题，该文提出了一种新的基于KL变换的椭圆模型肤色检测方法。算法首先对训练肤色样本进行了分布均匀化处理，然后以KL变换为基本工具最终得到了肤色分布区域的椭圆边界方程。方法简单直观。实践表明，该算法能完成对各种不同环境条件下所拍摄图像的肤色分割，效果理想，其性能明显优于常用的域值界定法和单高斯模型法。
关键词　　人脸检测　肤色模型　肤色分割　KL变换　Gauss模型
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An Elliptical Model Based on KL Transform for Skin Color Detection

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Abstract
Skin color detection is an important problem in computer vision. A new elliptical model based on KL transform for skin color detection is proposed in this paper. As to the proposed algorithm, firstly, the training skin color samples are made to distribute uniformly, then the elliptical boundary equation of skin color region is attained by means of KL transform. This method proves to be simple and intuitive. The experimental results on the images taken under a wide range of different environment demonstrate its efficiency and its clear improvement over the method based on explicit skin region boundary and single Gaussian model.
Key words　Face detection　Skin color model　Skin color segmentation　KL transform,Gauss model

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