Skin Detection Using A Markov Random Field And A New Color Space

Chenaoua, K. Bouridane, A.;Comput. Eng. Dept., KFUPM, Dhahran; Image Processing, 2006 IEEE International conference;Publication Date: 8-11 Oct. 2006;ISBN: 1-4244-0481-9 King Fahd University of Petroleum & Minerals

http://www.kfupm.edu.sa

Summary

In this paper, human skin detection is performed using a new color space coordinate and a Markov random field based approach. The proposed color space uses a variant of the principal component analysis technique to reduce the number of color components. The MRF model takes into account the spatial relations within the image that are included in the labeling process through statistical dependence among neighboring pixels. Since only two classes are considered the Ising model is used to perform the skin/non-skin classification process

For pre-prints please write to:abstracts@kfupm.edu.sa