عنوان مقاله:

Surface Reflectance Model for Outdoor Machine Vision in Bandar Abbas, Iran

محل انتشار:

کنفرانس بین المللی مهندسی، هنر و محیط زیست (سال: 1393)

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خلاصه مقاله:

Most outdoor machine vision applications specifically those which are based on color recognition depend heavily on accurate modeling of daylight and surface reflectance. Existing daylight models have deficiencies that limit its use to predict the color of incident light for tropical places such as Bandar Abbas, Hormozgan. A new context based daylight color model showing the color of daylight for a broad range of sky conditions in HSV color space is developed before for Bandar Abbas. Also existing surface reflectance models make assumptions that do not apply to outdoor images. Therefore, in this paper a new surface reflectance model called Normalized Photometric Function (NPF) is built for outdoor machine in HSV color space. The combination of the above two models could be used to estimate the apparent color of a surface in outdoor scenes.

کلمات کلیدی:

Color imaging, colorimetry, color models, glossy reflection, surface reflection function