Abstract

This paper describes the technique of shadow detection properly, this technique can detect both the cast and self-shadow. The method exploits local color constancy properties which are cause of reflectance suppression in excess of shadowed regions. For detecting shadowed areas in a scene, the values of the backdrop image are separated by values of the current frame in the true color (RGB) space. We use all three type of colour space in our work. Illumination map is extracted using a steerable filter framework based on global, local correlations in low and high frequency bands respectively. The lighting and colour features so extracted are then input to a decision trees are designed to detect shadow edges using AdaBoost. The simulation results give us an idea about the performance of the proposed method as good with boundary marking on shadow and nonshadow region with high accuracy.

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**Index Terms**

Computer Science  Pattern Recognition

**Keywords**

Shadow detection, Amplitude Modulation & Luminance Modulation, Colour Feature segmentation and Feature extraction, Illumination Map, Condition Random Field (CRF)