Illumination Classification Based on Image Content

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ABSTRACT

The approach present in this paper, introduces two new issues:

1. Illumination classification is performed rather than illumination estimation.

2. Illumination evaluation is image content dependent, specifically we use an object based approach. Thus using spatial information in the image, pixels associated with an object are segmented and grouped as a subset that is considered in the illumination estimation process using the object’s spectral characteristics.

Simulation and real image experimentation, show that the Object Based approach indeed improves performance over standard Illumination Classification.

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