Just-in-time outdoor color discrimination using adaptive similarity-based classifier

ABSTRACT

The color recognition and identification in operation time is a critical task in color-based computer vision applications. The main problem for recognizing the real color arises when the color characteristics are changed dynamically in the life time of a system. The outdoor color models which have been addressed by some researchers have serious practical limitations to employ in real applications. Moreover, due to high fluctuations in environment illumination, using conventional classifier for discriminating colors is a complicated task. In this paper, a just-in-time and model-free solution in order to discriminate outdoor colors on data driven modality is proposed. For this purpose, adaptive similarity-based classifier is utilized to track the color's data evolution during a day.