

REAL-TIME HAZE REMOVAL USING DARK CHANNEL PRIOR(DCP)

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Images captured in unfavourable weather conditions, often suffer from degraded visibility, which will create a lot of impacts on the outdoor computer vision and computational photography systems, such as video surveillance, remote sensing space cameras, and intelligent transportation assistance system and so on. The presence of cloud, fog or smoke which fades the colours and reduces the contrast of the observed things is the major problem in outdoor images. In this paper, a real-time haze removal method for embedded system applications using dark channel prior(DCP) is proposed to improve the visibility of an image. The goal is to achieve good dehazed images based on dark channel prior. To enhance the timing efficiency and to estimate the atmospheric light and transmission light an approximate hardware architecture is proposed. The computational time needed for this method is less when compared to other haze removal methods and also it obtains good image recovery results even with larger images.