Using dynamic transmission map for dehazing single image with tropical atmospheric condition

ABSTRACT

Ordinarily, outdoor pictures are degraded through light scattering and absorption from the atmosphere's dust, mist, haze, and smoke. These have an effect on the image captured and cause terrible visibility, dimmed luminosity, low contrast, and coloration distortion. Therefore, it is essential for dehazing to restore photographs captured in inclement weather. The critical intention of photo dehazing is to enhance the details on visibility, edge, and texture and retain the structure and colours of the picture without data loss. Many algorithmic methods, introduce dehazing at a certain haze level. There is a lack of a dehazing algorithm focusing on the varying haze density in order to enhance visibility. This paper proposes an improvement of the dehazing algorithm based totally on the varying meteorological visibility with a dynamic transmission map. This algorithm focuses on removing haze at different levels based on the visibility range, which is different from most existing dehazing algorithms.