An Overview of Fog Removal Algorithms

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Abstract

Visibility is lost in the field of view and areas of interest in images captured in foggy weather conditions. The process of removing the fog from these images and revealing the areas of interest is called dehazing, defogging or fog removal. Visibility in the image obtained after this process is increased by removing the fog. This process depends on the time the image was captured (day, night), the density of the fog in the image, the light source in the image, etc. Researchers used different algorithms to solve this problem. In this paper, different fog removal algorithms that are prominent in the literature will be examined. During this review, the results obtained from different algorithms will be compared with each other through different image quality criteria and the strengths and weaknesses of the algorithms will be revealed. Investigations will be performed on both images with real fog and O-HAZE dataset samples containing images with artificial fog.

Keywords: *Image Processing, Fog Removal, Image Restoration, Contrast Enhancement, Dark Channel Prior Algorithm*

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