Abstract

Underwater images are used to explore the unique life and the world that exists under the water. These images have less clarity, diminishing colors, low contrast. All these issues are a result of haze in underwater images. So, Underwater image haze removal algorithms become very important and necessary for many vision applications. In this paper, after a brief overview of existing methods of haze removal and discovering their limitations, we present a novel technique of underwater image haze removal based on Fuzzy Based DCP and AHE. AHE has been used to remove the problem of uneven illumination. The proposed technique has the ability to remove the limitations of existing techniques. Different kind of image quality assessment metrics have been used to evaluate the effectiveness of proposed technique over the existing one. The proposed technique give efficient results for different hazy underwater images by removing the haze to a good extent and improving the quality.

References


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Index Terms
Computer Science
Image Processing

Keywords
Underwater Image Haze Removal  Fuzzy Logic