Abstract

The unwanted environmental circumstances decrease the visibility and hidden information of remotely sensed images. Since visibility is a significant quality issue in these images, thus, visibility improvement methods are necessary for improving the significant details of remotely sensed images. This paper has proposed a novel technique for improving the visibility of outdoor images. The proposed method produces efficient results by using fuzzy filter based dark channel prior. The fuzzy filter can automatically extract the local atmospheric light and roughly eliminate the atmospheric veil in local detail enhancement. The proposed technique is designed and implemented using MATLAB with the help of image processing toolbox. The qualitative results have clearly show that the proposed image enhancement technique can preserve significant detail of the original image.

References

1. Wei, Sun, and Han Long,"A New Fast Single-Image Defog Algorithm", Intelligent System
Design and Engineering Applications (ISDEA), 2013 Third International Conference on. IEEE, 2013


Index Terms

Computer Science

Algorithms
Keywords

Dark channel prior, Haze, Airlight, Fuzzy filter