Abstract

The filtering scheme proposed in this paper finds the impulse noise in the image with the help of switching median filter. The corrupted and uncorrupted pixels in the image are found by comparison between the pixel value with the one (max) and zero (min) values in the transparent panel (window) which we selected one. If the pixel intensity is belongs to the zero (min) and one (max) values, then it is an uncorrupted pixel and it is left as it is. If the value does not belong within the particular value, then it is a corrupted pixel and is substituted by the median pixel value or already processed immediate neighboring pixel in the current filtering window. A switching median filtering scheme has been developed in this paper. This filter help to eliminate
the impulse noise and this filter has been producing strong impression to improve the performance. Filtering scheme is carried out only on corrupted pixels, and uncorrupted pixels are remaining as it is. Due to this reason pixel misplaced process gets prevented. So that the proposed filter outcome images are found to be pleasant for visual perception and also the beneficial features of the images, namely, edges and fine details are preserved satisfactorily. The proposed filter has been shown to out-perform other existing filters in terms of noise elimination and feature preservation properties.

Refer
ences

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Index Terms

Computer Science

Image Processing
Enhancement of Image with the help of Switching Median Filter

**Keywords**
- Salt And Pepper Noise
- Impulse Noise
- Mean Square Error
- Smf
- Peak Signal To Noise Ratio