Rain Streaks Detection and Removal in Image based on Entropy Maximization and Background Estimation

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Abstract

The rain removal from an image in the rainy season is also a required task to identify the object in it. It is a challenging problem and has been recently investigated extensively. In this paper, the entropy maximization and background estimation based method is used for the rain removal. This method is based on single-image rain removal framework. The raindrops are greatly differing from the background, as the intensity of rain drops is higher than the background. The entropy maximization is very much suitable for the rain removal. Experimental results express the efficacy of the rain removal by proposed algorithm is better than the method based on saturation and visibility features.

References

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23. Soo-Chang Pei, Yu-Tai Tsai, and Chen-Yu Lee “Removing rain and snow in a single image using saturation and visibility features, Graduate Inst. of Comm. Engg., Nat. Taiwan University, Taipei, Taiwan.


Index Terms

Computer Science  Image Processing

Keywords

Dictionary learning, image decomposition, morphological component analysis (MCA), rain removal, sparse representation