Framework for Performance Measure of Super Resolution Imaging

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Abstract : Image quality assessment plays an important role in image evaluation. This paper aims to present an investigation of classic techniques in use for image quality assessment, especially for super-resolution imaging. Researchers have contributed a lot towards the development of super-resolution imaging techniques. However, not much attention is paid to the development of metrics for testing the performance of developed techniques. In this paper, the study report of existing image quality measures is given. The paper classifies reviewed approaches according to functionality and suitability for super-resolution imaging. Probable modifications and improvements of these to suit super-resolution imaging are presented. The prime goal of the paper is to provide a comprehensive reference source for researchers working towards super-resolution imaging and suggest a better framework for measuring the performance of super-resolution imaging techniques.

Keywords : interpolation, MSE, PSNR, SSIM, super resolution

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