

ENHANCEMENT OF CONTRAST OF IMAGE USING DAYTIME AND NIGHTTIME IMAGE

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ABSTRACT

In night image enhancement fusion technique plays an very important role. In recent years, varieties of image fusion algorithms have been developed. Road traffic cab is monitored using video observation system. This system is limited by many objective factors because video may not be seen clearly.

In this paper, we have proposed a new hybrid technique which focused especially on the night vision application. This technique is based upon extraction of moving object in which daytime and nighttime captured image fused. First weighted sum histogram equalization technique is applied on nighttime image for enhancement. Further night enhanced image and daytime captured were fused using adaptive threshold based fusion technique and PSNR and MSE were calculated based upon the presence of noise from 0 to 120%. The observed results were compared with Weigner Distribution Technique which earlier reported technique for night image enhancement. It is observed that maximum value of PSNR is 65.9dB and MSE is 0.128 at 0% noise using fusion based technique which is very high as compared to reported technique. The results of this algorithm are very effective and presented for the human evaluation.

KEYWORDS: Image Enhancement, Image Fusion, Night Vision