A Study on Partial Enhancement of Video Frames

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ABSTRACT

With the information technology developments increasing, the video monitoring system of the environment is becoming a concern. We see surveillance cameras everywhere we go; however, when an emergency has happened, we can rarely determine the objects from the video monitoring system because the images shown are small in details. Now we can use image enlargement technology along with the technique of computer vision systems combined with the intelligent video monitoring system which can trace the object's precise movements. In recent image enlargement techniques, the technology would display the edge of the objects obscurely and it would also decrease the image quality. The research developed the method of image enlargement and image enhancement which mainly aims at the foreground images retrieved from the video monitoring system and the basis of different image area types. In addition, we can operate improved image interpolation to adjust the internal pixel value and decrease the lack of detail while the image is enlarged. Furthermore, the technique will make the image become more fluent and promote the image quality which could show detailed information to help advance the tracing accuracy of the video monitoring system.

Keywords : image enhancement ; image interpolation ; edge-directed interpolation

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