Abstract

Image restoration is the process of clearing the degraded image to obtain the original image. The main aim of the work is to restore the blurred X-Ray image using Blind Image Restoration. It is very important part of image restoration to recover image without the knowledge of the reason of its degradation. At first, the original X-Ray image is degraded using the Degradation Model. With the addition of blur we get the blurred X-Ray image. In the edges of the blurred X-Ray image, the ringing effect can be detected using Ant Colony Optimization method and then it can be removed before restoration process. An estimate is done about the unknown degradation function and using that an estimate of the original X-Ray image is produced. Ant colony Optimization (ACO) is a nature inspired optimization algorithm that is motivated by the natural foraging behavior of ant species.

References

Restoration of Medical Images using Blind Image Deconvolution based on Ant Colony

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Index Terms

Computer Science

Signal Processing
Keywords

Blind Image Deconvolution  Ant Colony Optimization  X-Ray Images  MSE  PSNR.