Abstract

Even though Image Restoration being a conventional problem in image processing, is still a demanding area and has always attracted the interest of research community. Image restoration algorithms are important as it serves a wide range of real world applications such as astronomy, medical imaging and photo editing are just a few which demands a good quality image for further high level processing. Image restoration methods aim to reduce the degradations that have occurred while the digital image was being obtained. All natural images have gone through some sort of degradation when they are acquired, processed or displayed because of sensor noise, camera misfocus, blur caused by relative motion between object & camera, atmospheric turbulence and others. The paper deal with restoration of images degraded by linear space-invariant blurs. Paper presents mathematical modeling of linear shift-invariant image formation process, possible sources of degradation, and reviews some fundamental & specific methods of restoration.

References

signal processing magazine, pp 24-41, 1997.
- Jiang, X., Cheng, D. C., Wachenfeld, S., Rothaus, K., "Motion Deblurring.", University of Muenster, Department of Mathematics and Computer Science, 2005
- Dr. Tania Stathaki, "Image Restoration," Imperial College of Science Technology and Medicine, Department of Electrical and Electronic Engineering, 2012
- C. B. Atkins, C. A. Bouman, and J. P. Allebach, "Optimal image scaling using

Index Terms

Computer Science

Image Processing

Keywords

Blur Spatial-Invariance PSF Deconvolution