Abstract

Wavelet denoising of medical images relies on the technique of thresholding. A disadvantage of this method is that even though it adequately removes noise in an image, it introduces unwanted artifacts into the image near discontinuities due to Gibbs phenomenon. A total variation method for enhancing chest radiographs is implemented. The approach focuses on lung nodules detection using chest radiographs (CRs) and the method achieves high image sensitivity and could reduce the average number of false positives radiologists encounter.

References

1. International agency for research on cancer, 2012.


Index Terms

Computer Science
Image Processing

Keywords

Total Variation, Chest Radiograph, Algorithm, Convolution, Denoising