Abstract

A suggested approach is presented in this paper to obtain high-resolution images from the fusion and then interpolation of Magnetic Resonance (MR) and Computed Tomography (CT) images. MR and CT images are fused with either the Discrete Wavelet Transform (DWT) or the curvelet transform. After that, a least-squares interpolation step is carried out on the wavelet sub-bands of the fusion result. Simulation results show the feasibility of the fusion process to obtain images with more details and the efficiency of interpolation to obtain high-resolution images.
References

- J. L. Starck, E. Candes, and D. L. Donoho, "The curvelet transform for image


**Index Terms**

Computer Science  
Algorithm

**Keywords**

Image interpolation  
Image fusion  
and Curvelet transform