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
Least-Squares Interpolation of Fused MR and CT Images in the Wavelet Domain


Index Terms
Computer Science
Algorithm

Keywords
Image interpolation  Image fusion  and Curvelet transform