Abstract

With the increased development of technology, it is necessary to retrieve information from multi source images in order to produce a high quality fused image with spatial and spectral information. Image Fusion is a process which allows the combination of the relevant information from a set of images into a single image where the resultant fused image will be more informative than any of the input images. Though the fused image can have complementary spatial and spectral resolution characteristics, the existing image fusion techniques can distort the spectral information of the multispectral data while merging. In this Paper, a rough set theory based fuzzy c-means approach is introduced for image fusion. The distribution of the local information and spatial constraint affect the damping extent of the pixels in neighbors. With the weighted rough and fuzzy factors depends on the space distance of all the neighboring pixels and their gray-level difference accurately measure the variance and enhance its robustness to noise and outliers.


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Image Fusion based on Local Pixel Information with Rough-Fuzzy C-means Approach

Engineering Research, Volume 3, Issue 11, pp-1-9, November-2012  ISSN 2229-5518

Index Terms

Computer Science  
Fuzzy Systems

Keywords

Multi-focus image fusion  RFCM.