



An Image Fusion Method Using DT-CWT and Average Gradient

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Abstract— Image fusion is a technique of combining complementary information from multiple images originated from different sources into single fused image. This paper proposes an image fusion method to merge remote sensing satellite images based on Dual-Tree Complex Wavelet Transform (DT-CWT). The Quickbird and Worldview satellite data are used for carrying out the experimental work. The objective and visual results show the superiority of the proposed fusion method over that based on classical discrete wavelet transform (DWT) and other methods based on the DT-CWT.

Keywords— Image fusion; Remote sensing; Dual-Tree complex wavelet transform DT-CWT; discrete wavelet transform DWT

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