Abstract

In this paper, an image super-resolution technique is proposed which is based on interpolation of high frequency sub-band images obtained by Discrete Wavelet Transform on input image. In those sub-bands edges are enhanced by introducing an intermediate stage by using Stationary Wavelet Transform. The wavelet transform is applied in order to decompose image into different sub-bands. In those sub-bands, the high frequency sub-bands are interpolated and then these estimated high frequency sub-bands are modified by using high frequency sub-bands obtained through SWT. These all sub-bands are fused to generate a new high resolution by using inverse Wavelet transform techniques. The proposed results depict the conventional and state of art image resolution enhancement techniques.

References

A DWT-SWT based Image Super Resolution with Multi Surface Fitting


Index Terms

Computer Science  Image Processing
Keywords

Image super resolution  Discrete and stationary wavelet transform.