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catheter and to provide a 3-D reconstruction of left ventricular anatomy. However, EAVM measurements only represent the endocardial scar with no transmural or epicardial information. A platform for the integration of cardiac electrograms measured using the EAVM system with non invasive images of myocardial scar using LGE–MRI (Bolter, 2000). The derivation of MMSE estimators for the DFT coefficients of speech signals, develop a spectral domain speech enhancement algorithm, and derive Hidden Markov Model (HMM) based MMSE estimators for speech period gram coefficients under this gamma assumption in both a high uniform resolution and a reduced-resolution Mel domain (Cui, 2005). A Hyper Spectral (HS) image resolution enhancement algorithm based on spectral unmixing fusion of the high-spatial-resolution Multispectral (MS) image and the low-spatial-resolution HS Image (HSI). To dividing the whole image into several sub images, based on which the performance of the proposed spectral-unmixing-based fusion algorithm can be further improved (Lombardo, 2001). Minimum Residual Power Search Method (MRPSM), the resolution capability of a phase-conjugating lens by employing a signal processing algorithm, which has been extensively used in the electromagnetic area for imaging purposes (Guida, 2008).

Synthetic aperture imaging causes a fundamental limitation to shadow clarity because the illuminator is moved during the data collection. A moving target and compensating for the motion during the synthetic aperture imagery, to avoid the geometrical shadow (Sirmacek, 2011).

The Synthetic Aperture Radar (SAR) data is coherently combining an interferometric image. This algorithm is based on the wave number principle. In contrast to another method, developed by application to space borne the SAR data, Quantitative verification results are obtained by measuring the resolution of several corner reflectors placed in the area (Bolter, 2000). High-resolution (HR) synthetic aperture radar (SAR) images of the research activity in this field has been devoted to the attempt to retrieve geometric information on buildings in terms of their position, sizes by using simplified geometrical model. To employs a more refined model that accounts for both geometrical (including fine details) and electromagnetic properties of the Building (Cui, 2005). Through-wall radar images taken from man-portable systems have limited resolution due to the finite bandwidth and aperture size. Advantage over related image optimization algorithms in that the Lagrange multipliers are solved within the algorithm rather than being selected a priority (Lombardo, 2001). The acquired mammograms are High Dynamic Range (HDR) images having a 12 bit greyscale resolution. The BDMC is comprised of two main processing stages: (1) preliminary processing operations which include standardization of the intensity range and expansion of the intensities which belong to the low intensity range. (2) Adaptively commanding the HDR range by integrating multiscale contrast measures (Guida, 2008).

High - throughput and area efficient VLSI architecture for intra prediction in the emerging high efficiency of a Video Coding Standard. There are three design techniques are proposed to address the complexity systematically: (1) a hierarchical memory deployment that stores neighboring samples in 4.9 Kb of static RAM (SRAM) instead of 43.2 k gates of registers its increases the throughput by processing reference samples in registers; (2) a mode of adaptive

scheduling schemes for all prediction units provides at least two samples/cycle throughputs while using the low throughput SRAM and it can achieves the 2.46 samples/cycle on the average based experimental results. (3) Resource sharing multipliers and the readout circuits of reference sample registers can save 2.5 k gates.

These techniques can be a efficiently reduce the area of 40% but induces the more power because of its additional signal transitions. The Signal gating circuits are applied to reduce 69% of SRAM power and 32% of logic power, which cost only 1.0-k gates (Thiele, 2010).

The synthesis of low-resolution panchromatic (Pan) image is a critical step of Ratio Enhancement (RE) and Component Substitution (CS) pan sharpening methods. The two types of methods assume a linear relation between Pan and Multispectral (MS) images. To tackle this problem, the pixels of Pan and MS images are divided into several classes by k-means algorithm, and then multiple regressions is used to calculate summation weights on each group of pixels (Sparr, 2007).

EXISTING METHOD

Shadow Enhancement

The HVPC algorithm for shadow enhancement is set up by using a height-dependent phase to compensate the defocus factor term of the azimuth direction, and this algorithm is proposed for the complex SAR image data. The shadow caster corresponding to the shadow in the SAR image can be decided, and the height of the caster can be estimated by the incident angle of the radar. HVPC is proposed for the complex SAR image; the main steps are listed as follows.

1) Detect the shadow region.

2) Estimate the height of the shadow caster according to the incident angle.

3) Make fast Fourier Transform (FFT) in the azimuth direction.

4) Make the phase compensation.

5) Make inverse FFT in the azimuth direction.

To developed a novel approach by using HVPC to sharpen the boundary of the shadow in the SAR image. Our solution considers the differences between the shadow point and the caster in the SAR imaging formation process, and the compensation is made on the azimuth. Furthermore, the relationship between the QPE and the height of the caster and radar is approximately deduced, and we note that the QPE

Figure 1: Simulated Images

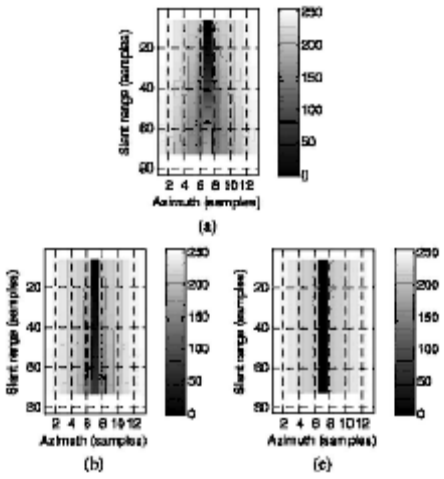


Figure 2: Mini SAR Image

is approximately a linear function of the height of the caster. Simulations and the experiment on real SAR data demonstrate the validity and the better effect on shadow enhancement of the approach have proposed.

PROPOSED METHOD

Cubic Spline

Cubic spline interpolation is a method of a fast efficient and stable function interpolation. The spline interpolation is a parallel with its rotational interpolation is an alternate method of polynomial interpolation.

The spline interpolation processed on some principles, the interpolation is divided into the sub intervals. The each interval interpolate by using a third degree polynomial. The general coefficients are chosen to certify conditions. It's also contains function linearity between the nodes, higher derivative method.

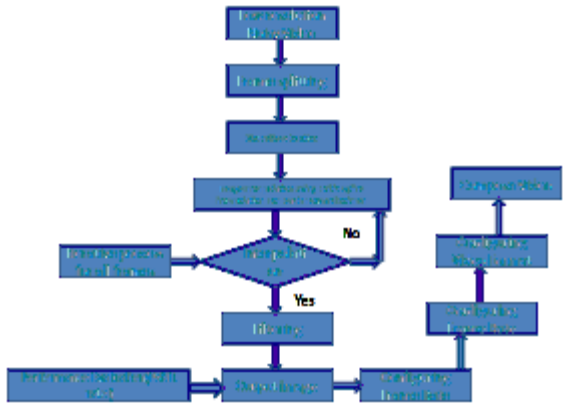
The advantages of the spline method are a stability and simplicity calculation. The sets of spline interpolation equations are solved to construct the conditions, the result calculation stays the even for an big notation it's performed by O (N). The Polynomial coefficients are calculated precisely. As a result, the calculation scheme stays stable even for big N, time, and interpolation in O(log(N)) time.

In the flow chart represents the noise input image has passed to the frame splitter. The splitting image has been processed to interpolation, and it passed to the salt and Pepper Noise.

Salt and Pepper Noise

Salt and pepper noise is a common model for the effects of bit errors in transmission, malfunctioning pixels and faulty memory locations. Salt-and-pepper noise is a form of noise sometimes seen on images. It presents itself as sparsely occurring white and black pixels. An effective noise reduction method for this type of noise is a median filter or a morphological filter. For reducing either salt noise or pepper noise, but not both, a contra harmonic mean filter can be effective. The algorithm utilizes previously processed neighbouring pixel values to get better image quality than the one utilizing only the just previously processed pixel value.

Figure 3: Flow Chart of Spline Interpolation



CLACHE

Contrast Limited AHE (CLAHE) it mainly differs from ordinary histogram equalization and its limiting. This feature can also be applied to global histogram equalization, its giving rise to Contrast Limited Histogram Equalization (CLHE), is rarely used in practice. In the case of CLAHE, the contrast limiting procedure is to be applied for each neighborhood from a transformations function is derived. The contrast amplification in the vicinity of a pixel value is given by the slope of the transformation function. It is proportional to the slope of the neighborhood Cumulative Distribution Function (CDF) and therefore to the value of the histogram at that pixel value, the CLAHE limits the amplification by clipping the

histogram at a predefined value before computing the CDF.

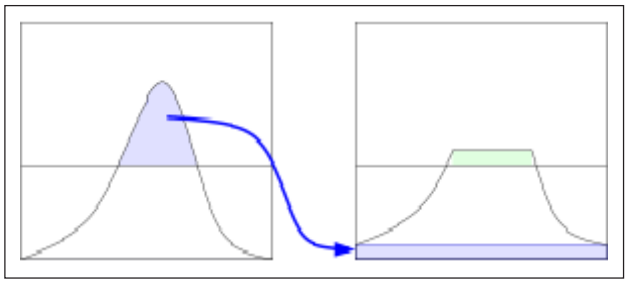
EXPERIMENTAL RESULTS

Salt and Pepper Noise

The image has been added to the salt and pepper noise. This noise mainly presence of to clear the resolution enhancement. It mainly to removes the blur image. It improves the pixel image.

Interpolation

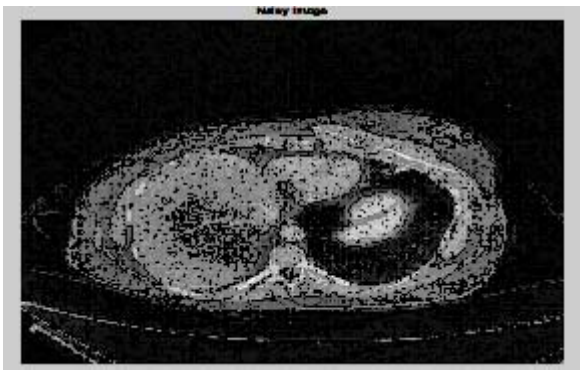
Interpolation is a method of constructing new data points within the range of a discrete set of known data points. A different problem which is closely related to interpolation is the approximation of a complicated function by a simple function. Calculating the interpolating polynomial is computationally expensive compared to linear interpolation.



Median Filter

The median filter is a nonlinear digital filtering technique; it's mainly used to remove the noise.

Figure 4: Noise Image

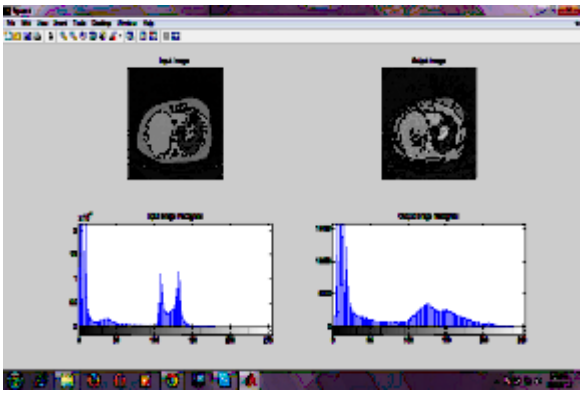


Such as noise reduction is a typical pre-processing step to improve the results. The filter must process each entry of the signal, for the large signals such as the images and the efficiency of this median calculation is a critical factor.

PSNR Value

PSNR is abbreviated by Peak signal-to-noise ratio; it's the ratio between the maximum possible power of a signal and the power of corrupting noise that affects the fidelity of its representation. The signal in this case is the original data, and the noise is the error introduced by compression. When comparing the compression codes, PSNR is an approximation to the human perception of reconstruction quality; a high PSNR indicates that higher quality.

Figure 6: Interpolation Output



CONCLUSION

The Process of Image Denoising is done by a two dimensional median filter. Drawback of the two dimensional median filter is that, it is able to remove the noise added manually. The noise Added automatically by enhancement of image is not able to denoise by two dimensional median filters. The process of image denoising is done with two dimensional median filter. In order to overcome the drawback of noise problem in

medical image, The switching bilateral filter is going to be use. And at the same time by using the switching bilateral filter, we can achieve PSNR value above 35 dB.

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