Dual Tree Class Inheritance 24-Jun-2016 16:13:54

```
WaveletData2D
                                         coeff
                                         level_norm
                                         nband
                                         nlevel
                                         nor
                                         type
                                         +WaveletData2D()
                                         +BiShrink (Ssig_latent, SigmaN)
+CalFilterNorm ()
                                         +calSigma()
                                         +convert2array()
                                         +decomposition(x)
                                         +latentSigma ( sigmaN, opt )
+latentSigma_unnormalize ( sigmaN, opt )
                                         +LocalSoft (\overline{S}sig\_latent, SigmaN)
                                         +LocalSoft_unnormalize (Ssig_latent, SigmaN)
                                         +minus(obj2)
                                         +norm(p)
                                         +normcoeff()
+operate_band1(fun_handle, w)
                                         +operate_band2 (fun_handle, w1, w2)
                                         +plot_DAS_freq (scale)
                                         +plot_DAS_time (scale)
                                         +plotnorm (val)
                                         +plus (obj2)
                                         +reconstruction()
                                         +SoftThresh(T)
                                         +times (obj1)
                                         +unnormcoeff()
                                                         DualTreeWavelet2D
                                        FilterBank
                                         FirstStageFB
                                         +DualTreeWavelet2D (FSFB, FB)
                                         +BiShrink (Ssig_latent, SigmaN)
                                         +CalFilterNorm()
                                         +calSigma ()
                                         +convert2array ()
+decomposition (x)
+getlocalcoeff (i, j)
                                        +getiocalcoeff ( i, j )
+keeplocalcoeff ( ind )
+latentSigma ( sigmaN, opt )
+latentSigma_unnormalize ( sigmaN, opt )
+LocalSoft ( Ssig_latent, SigmaN )
                                         +LocalSoft_unnormalize (Ssig_latent, SigmaN)
                                         +minus (obj2)
                                         +norm (p)
                                         +normcoeff ()
                                        +normcoeff ()
+operate_band1 (fun_handle, w)
+operate_band2 (fun_handle, w1, w2)
+plot_DAS_freq (scale)
+plot_DAS_time (scale)
+plotnorm (val)
+plus (obj2)
                                         +reconstruction ()
                                         +SoftThresh (T)
                                         +times (obj1)
                                         +unnormcoeff ()
               DualTreeSplitHighLow2D
                                                                                         DualTreeSplitHighLowComplex2D
                                                                                                                                                                        fDualTree2D
                                                                          u_hi
                                                                                                                                                                FilterBank_col
                                                                          u_low
                                                                                                                                                                FilterBank_row
                                                                                                                                                               FirstStageFB_col
FisrtStageFB_row
isSameRowColFB
                                                                          +DualTreeSplitHighLowComplex2D ( FSFB, FB, u_hi, u_low )
+DualTreeSplitHighLow2D (FSFB, FB, u_hi, u_low)
                                                                          +decomposition (x)
                                                                          +reconstruction()
                                                                                                                                                                +fDualTree2D (FSFB, FB)
                                                                                                                                                                +decomposition (x)
                                                                                                                                                                +reconstruction ()
                                                                                                                                                                +wfft2_dt ( wt )
+wifft2_dt ( wf )
```

DualTreeSplitHigh2D

+DualTreeSplitHigh2D (FSFB, FB, u\_hi)

u\_hi

u\_low

+decomposition (x)

+reconstruction ()

u\_hi

+decomposition (x)

+reconstruction()