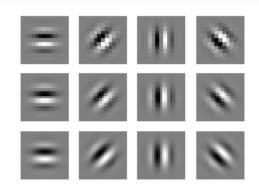
2018/3/27 gabor_test

```
In [4]: ### Import source
    from skimage import transform, io, data
    lena_512 = io.imread('image\\lena512.bmp', as_grey=True)
    lena_256 = transform.resize(lena_512, (256, 256))
```

```
In [5]: | ### Gabor transform test
         import convolution
         import numpy as np
         import matplotlib.pyplot as plt
         _{\text{theta}} = [0, 0.25*\text{np.pi}, 0.5*\text{np.pi}, 0.75*\text{np.pi}]
         _{1}amda = [4.0, 6.0, 8.0]
         _sigma = [2.0, 3.0, 4.0]
         _{gamma} = 1.0
         fig = plt.figure(figsize=(4, 3))
         for 1 in range(len(_lamda)):
             for t in range(len(theta)):
                  gb_real, gb_imag = convolution.FEA_GABOR(theta=_theta[t], lamda=_lamda[1], sigma=_sigma[1])
                  plt. subplot (len (_lamda), len (_theta), l*len (_theta)+t+1)
                  plt.imshow(gb_imag, cmap=plt.cm.gray)
                  plt.axis('off')
         plt.show()
```



```
In [6]: ### Gaussian blur test
fig = plt.figure(figsize=(12, 9))
for l in range(len(_lamda)):
    for t in range(len(_theta)):
        gb_real, gb_imag = convolution.gabor_2d(img=lena_256, theta=_theta[t], lamda=_lamda[1], sigma=_sigma[1])
        plt. subplot(len(_lamda), len(_theta), l*len(_theta)+t+1)
        plt. imshow(gb_imag, cmap=plt.cm. gray)
        plt. axis('off')
plt. show()
```

