

# NGTDM

May 5, 2016

```
In [13]: from ngtdm import Ngtdm

texture1 = np.array(Image.open('../images/texture1.tiff').convert('L'))
texture2 = np.array(Image.open('../images/texture2.tiff').convert('L'))
texture3 = np.array(Image.open('../images/texture3.tiff').convert('L'))
texture4 = np.array(Image.open('../images/texture4.tiff').convert('L'))

ngtdmt1 = Ngtdm(texture1, 1)
ngtdmt2 = Ngtdm(texture2, 1)
ngtdmt3 = Ngtdm(texture3, 1)
ngtdmt4 = Ngtdm(texture4, 1)

In [14]: ax = plt.subplot('221')
ax.set_e("Texture 1")
ax.imshow(texture1, 'gray')
ax.axis('off')

ax = plt.subplot('222')
ax.set_title("Texture 2")
ax.imshow(texture2, 'gray')
ax.axis('off')

ax = plt.subplot('223')
ax.set_title("Texture 3")
ax.imshow(texture3, 'gray')
ax.axis('off')

ax = plt.subplot('224')
ax.set_title("Texture 4")
ax.imshow(texture4, 'gray')
ax.axis('off')

plt.show()

print 'Texture1'
for x in ngtdmt1.features.items():
    print x
print '\n'

print 'Texture2'
for x in ngtdmt2.features.items():
    print x
print '\n'
```

```

print 'Texture3'
for x in ngtdmt3.features.items():
    print x
print '\n'

print 'Texture4'
for x in ngtdmt4.features.items():
    print x

```

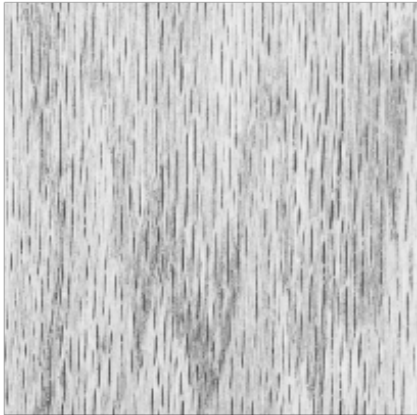
Texture 1



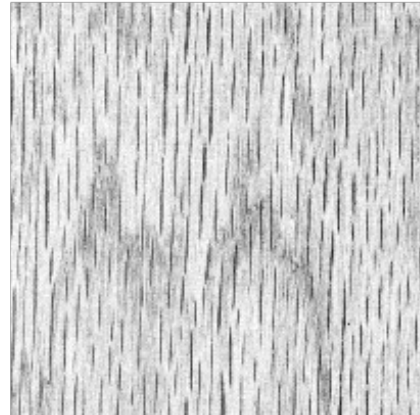
Texture 2



Texture 3



Texture 4



Texture1  
('bus', 0.51349854635111392)  
('cos', 5.0210212555751133e-05)  
('com', 249487.50944272042)  
('str', 1.1490261823812609)  
('con', 0.99020492528647075)

Texture2  
('bus', 2.0305560409043881)

```
('cos', 2.3510052608692956e-05)
('com', 332120.98104025185)
('str', 0.70977376489841593)
('con', 9.3419655180692427)
```

#### Texture3

```
('bus', 0.71815803958122704)
('cos', 3.4917547303011598e-05)
('com', 123617.41969440867)
('str', 0.68861151969198087)
('con', 0.46583780071228659)
```

#### Texture4

```
('bus', 1.6593883292422487)
('cos', 1.2208067602409651e-05)
('com', 69027.649166470888)
('str', 0.31771486963032086)
('con', 0.20553520628747374)
```