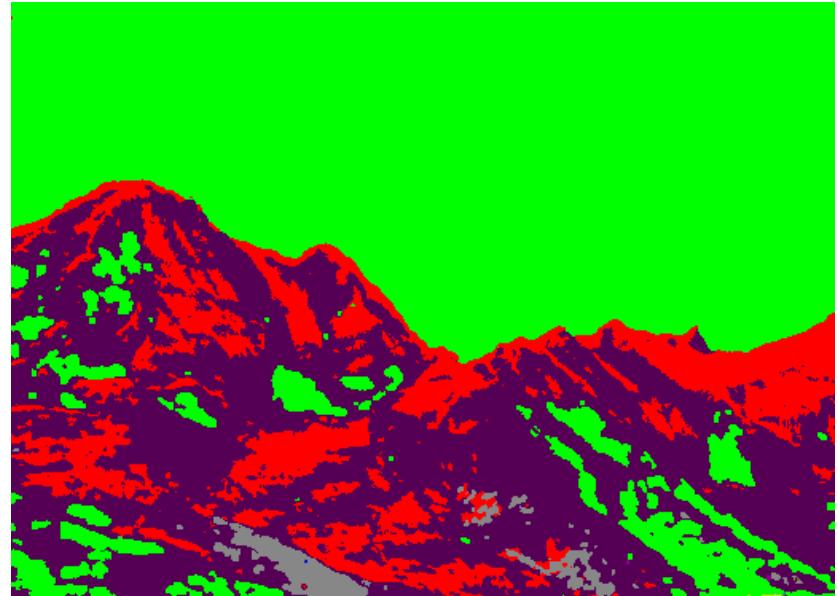
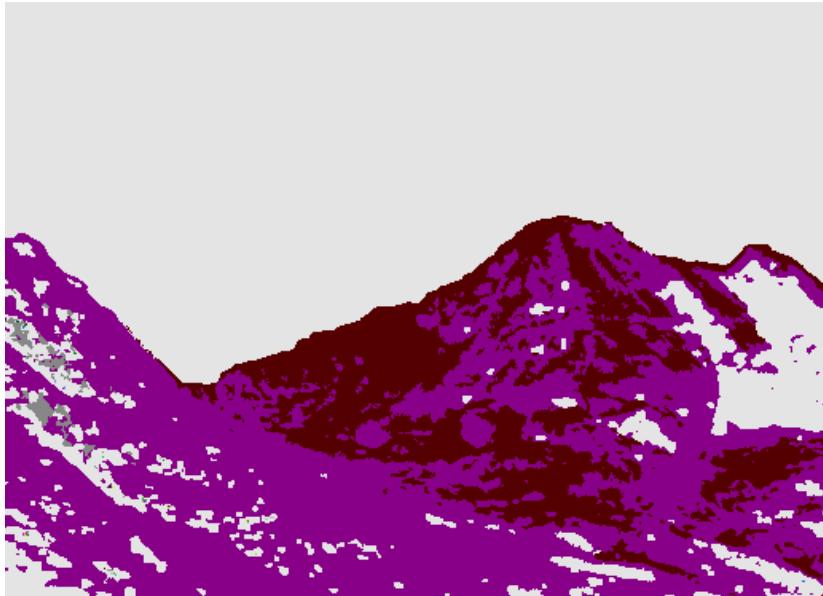
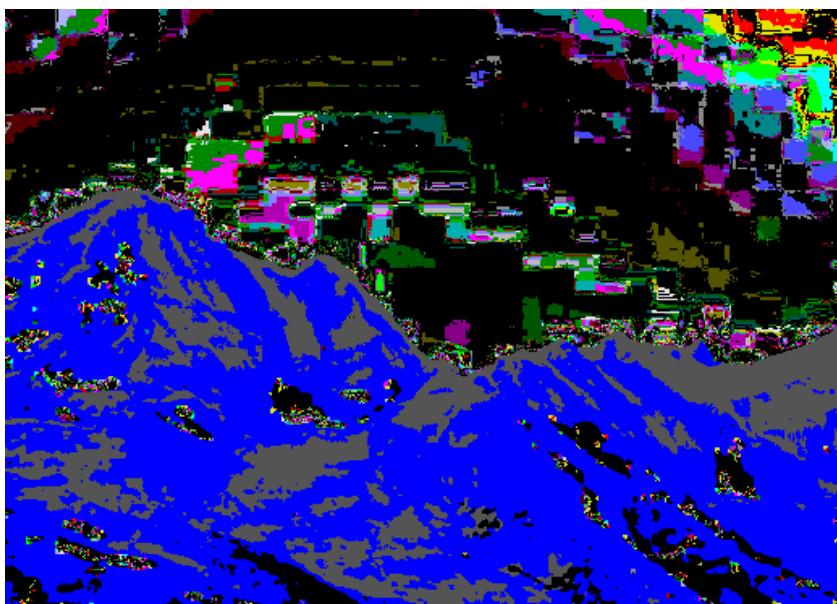
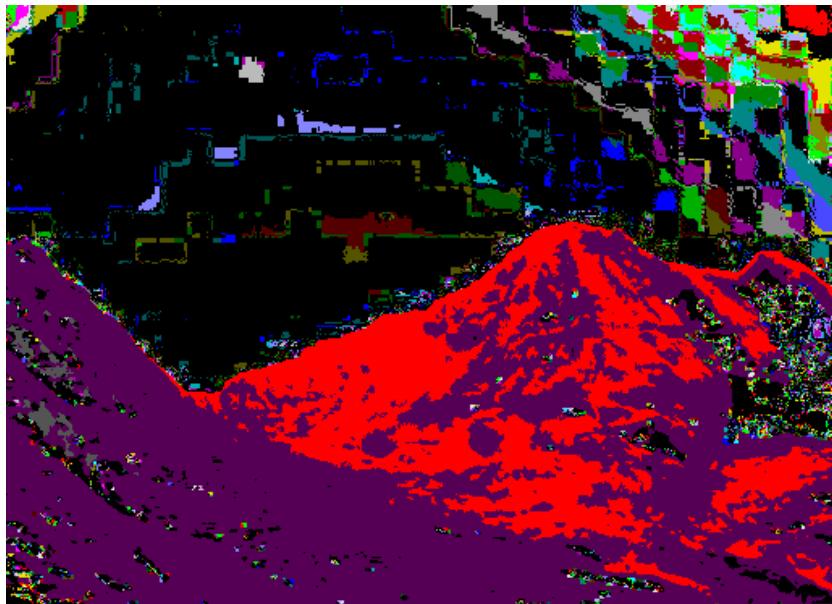


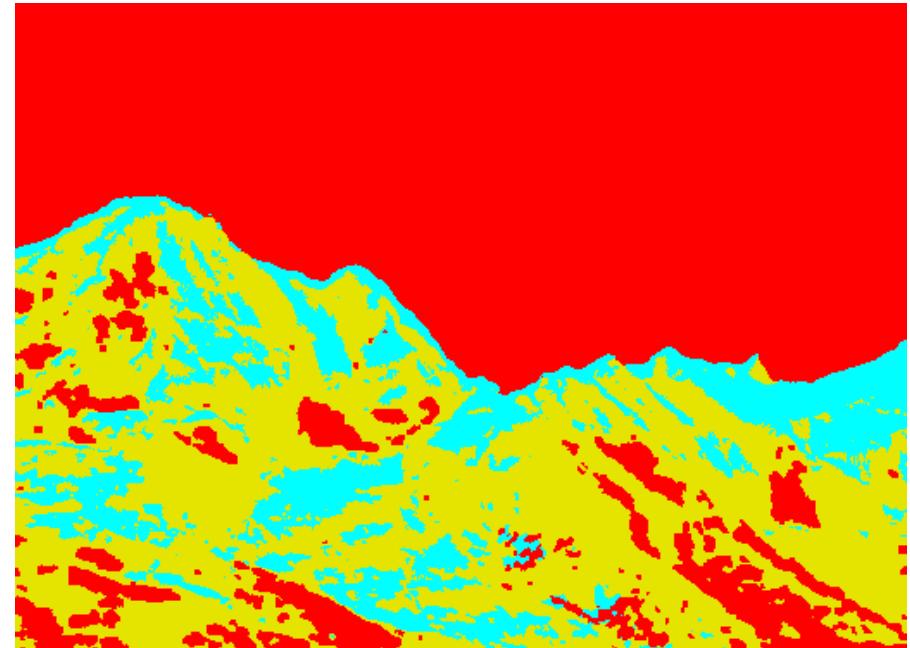
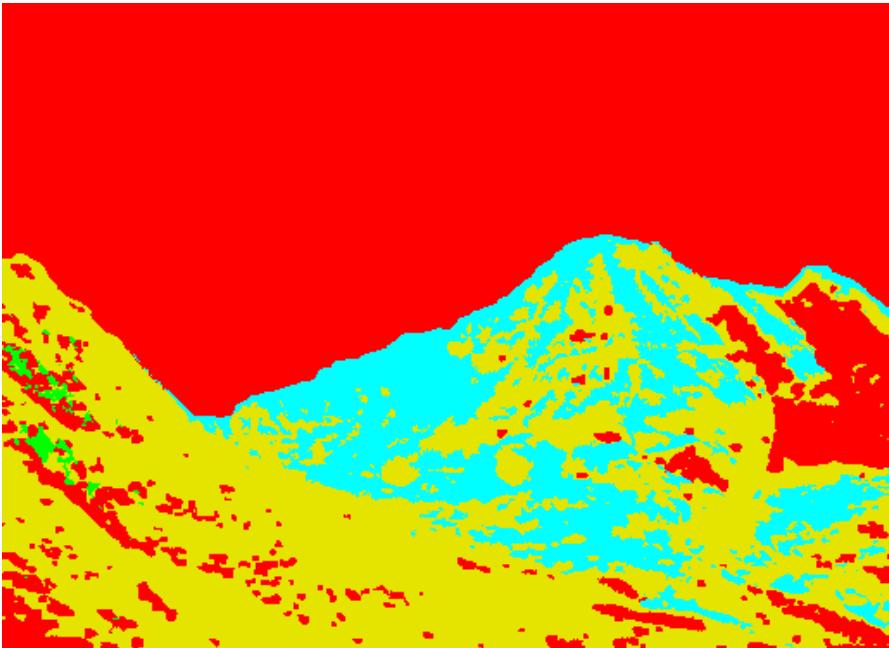
```
imageSegmentation.calculateUsingCIEXYAndClustering(gsImg1, true);
```



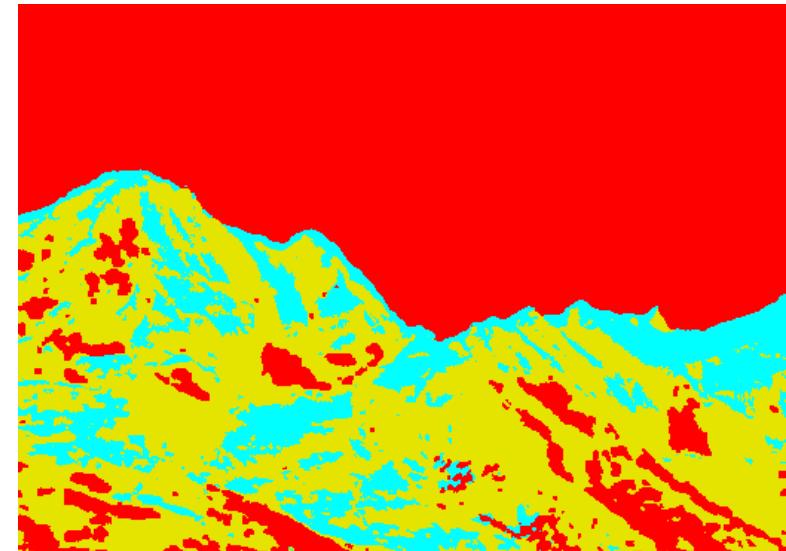
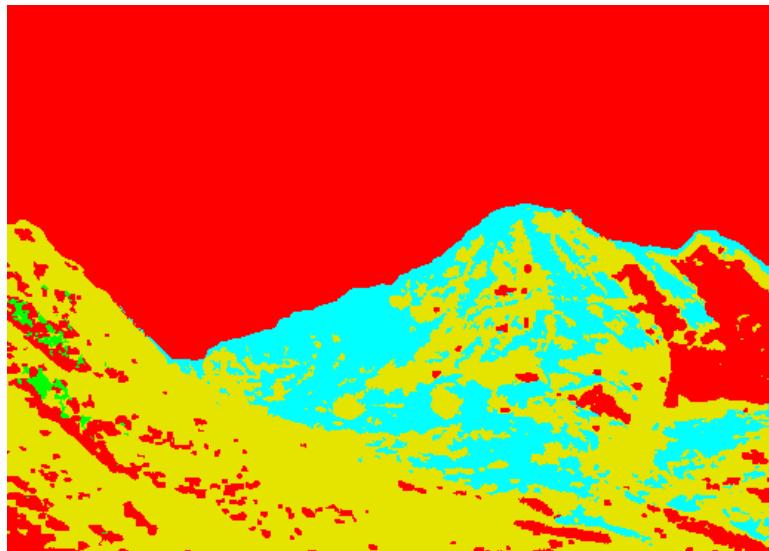
```
imageSegmentation.calculateUsingPolarCIEXYAndClustering(gsImg1, true);
```



```
imageSegmentation.calculateUsingPolarCIEXYAndFrequency(gsImg1, true);
```



```
imageSegmentation.calculateUsingPolarCIEXYAndFrequency(gsImg1, 0.2f, true);
```



```
int kBands = 2; imageSegmentation.applyUsingKMPP(gslImg1, kBands);
```



```
int kBands = 3; imageSegmentation.applyUsingKMPP(gslImg1, kBands);
```



```
int kBands = 8; imageSegmentation.applyUsingKMPP(gsImg1, kBands);
```



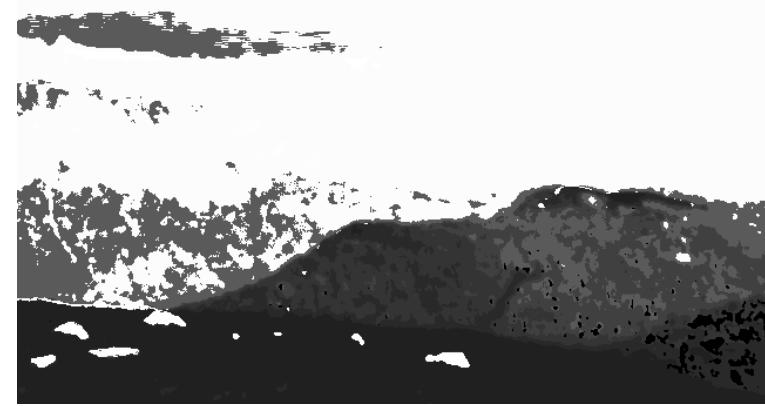
```
int kBands = 2; imageSegmentation.applyUsingCIEXYPolarThetaThenHistEq(gsImg1, kBands);
```



```
int kBands = 3; imageSegmentation.applyUsingCIEXYPolarThetaThenHistEq(gsImg1, kBands);
```



```
int kBands = 8; imageSegmentation.applyUsingCIEXYPolarThetaThenHistEq(gsImg1, kBands);
```



```
int kBands = 2; imageSegmentation.applyUsingCIEXYPolarThetaThenKMPPThenHistEq(gsImg1,  
kBands);
```



```
int kBands =3; imageSegmentation.applyUsingCIEXYPolarThetaThenKMPPThenHistEq(gsImg1,  
kBands);
```



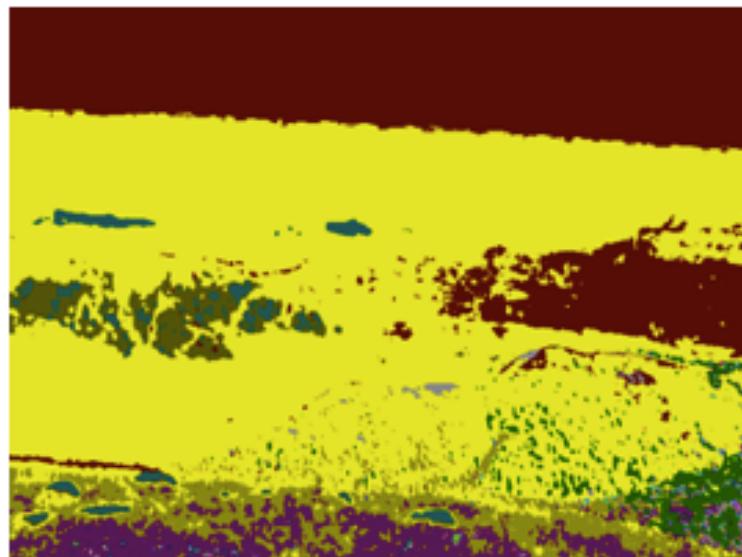
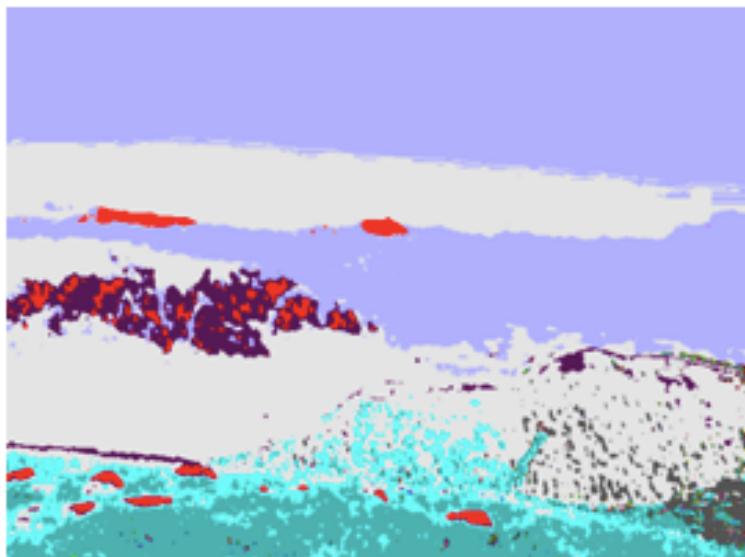
```
int kBands =8; imageSegmentation.applyUsingCIEXYPolarThetaThenKMPPThenHistEq
```



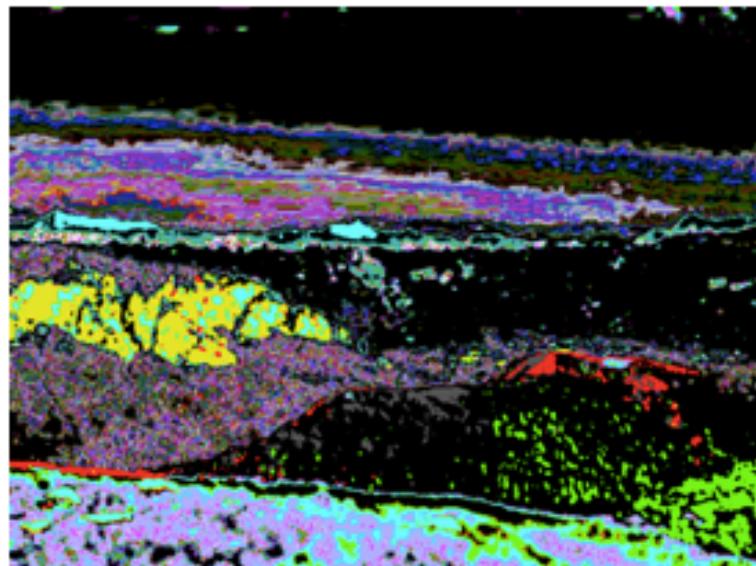
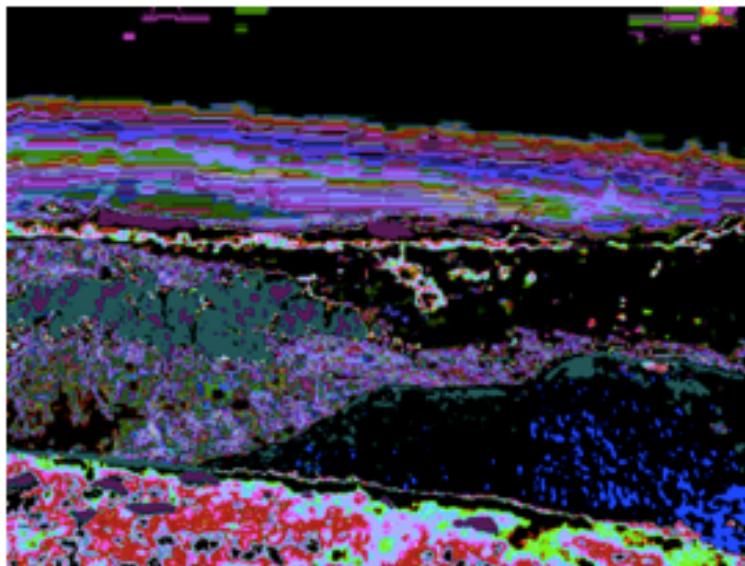
```
int kBands = 2; imageSegmentation.applyUsingCIEXYPolarThetaThenHistogram(gsImg1, kBands);
```



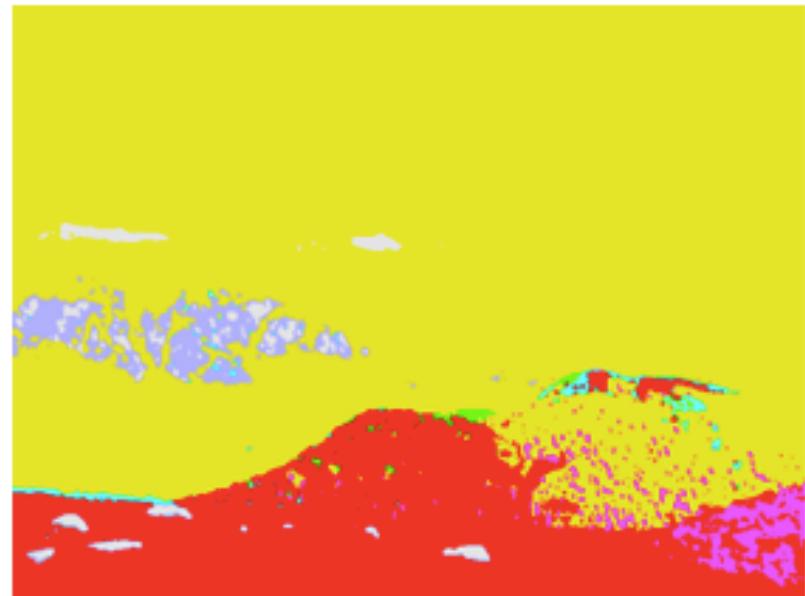
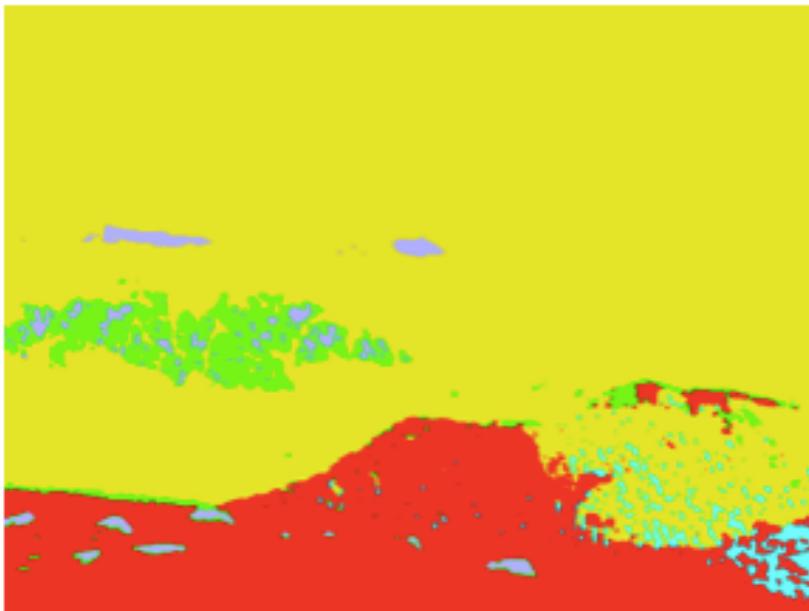
```
imageSegmentation.calculateUsingCIEXYAndClustering(gslImg1, true);
```



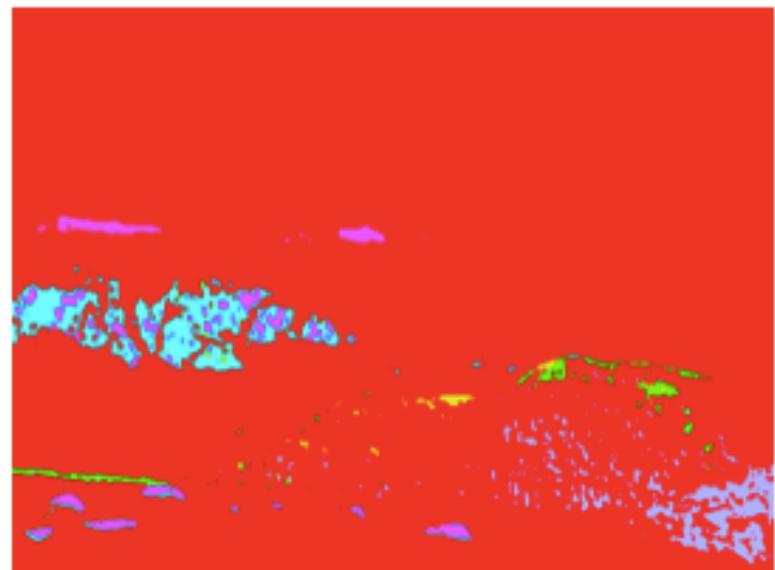
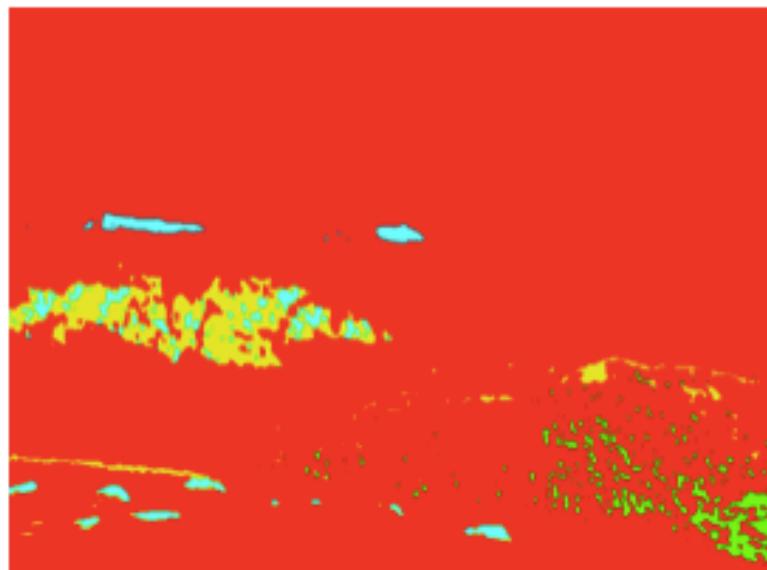
```
imageSegmentation.calculateUsingPolarCIEXYAndClustering(gslImg1, true);
```



```
imageSegmentation.calculateUsingPolarCIEXYAndFrequency(gslImg1, true);
```



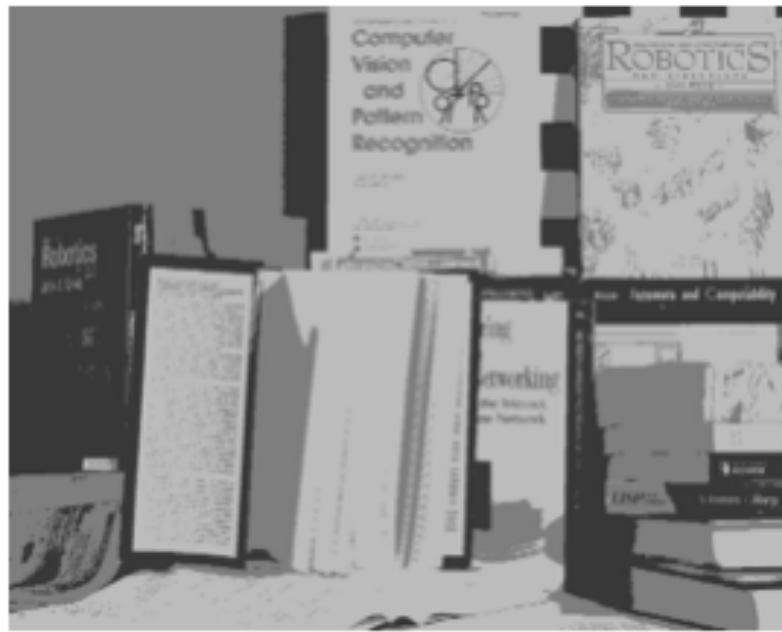
```
imageSegmentation.calculateUsingPolarCIEXYAndFrequency(gslImg1, 0.2f, true);
```



```
int kBands = 2; imageSegmentation.applyUsingKMPP(gslImg1, kBands);
```



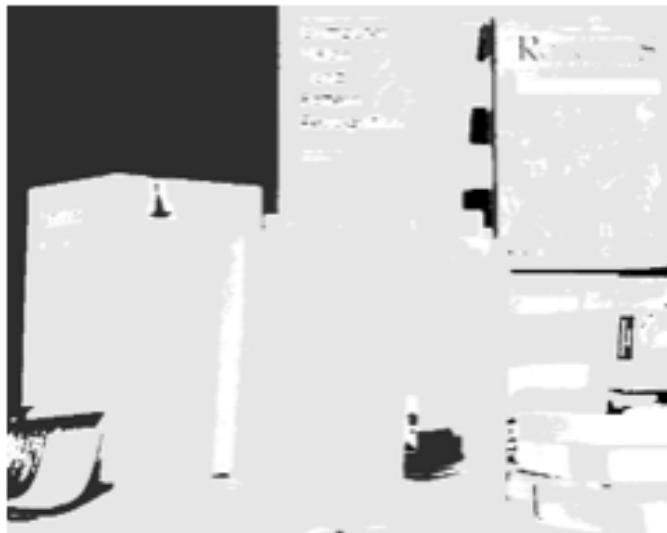
```
int kBands = 3; imageSegmentation.applyUsingKMPP(gslImg1, kBands);
```



```
int kBands = 8; imageSegmentation.applyUsingKMPP(gslmg1, kBands);
```



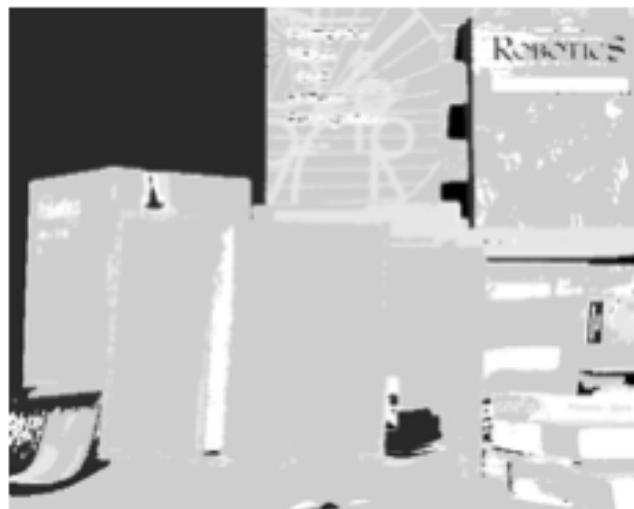
```
int kBands = 2; imageSegmentation.applyUsingCIEXYPolarThetaThenHistEq(gslmg1, kBands);
```



```
int kBands = 3; imageSegmentation.applyUsingCIEXYPolarThetaThenHistEq(gsImg1, kBands);
```



```
int kBands = 8; imageSegmentation.applyUsingCIEXYPolarThetaThenHistEq(gsImg1, kBands);
```



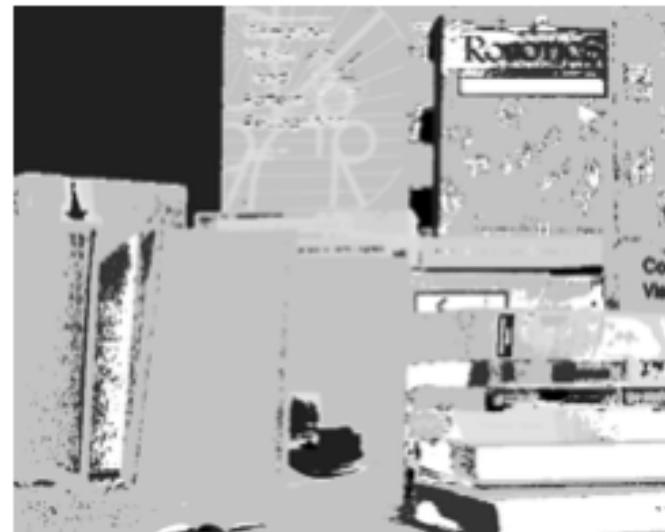
```
int kBands = 2; imageSegmentation.applyUsingCIEXYPolarThetaThenKMPPThenHistEq(gslImg1,  
kBands);
```



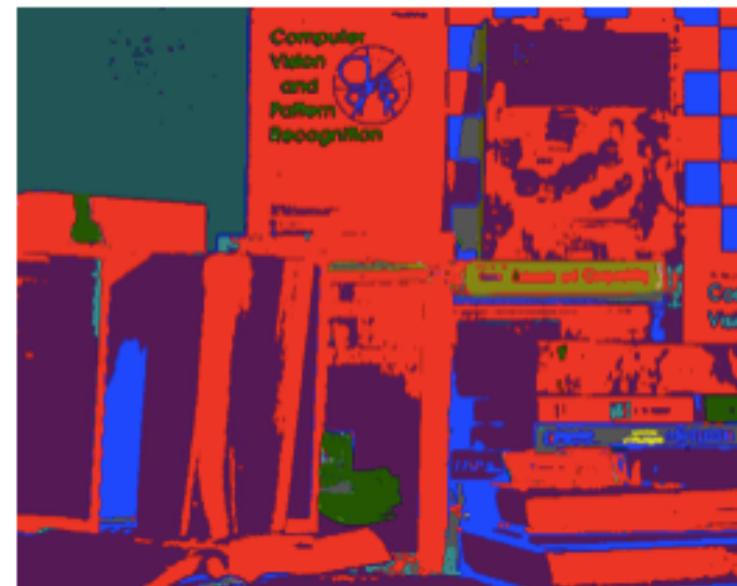
```
int kBands = 3; imageSegmentation.applyUsingCIEXYPolarThetaThenKMPPThenHistEq(gslImg1,  
kBands);
```



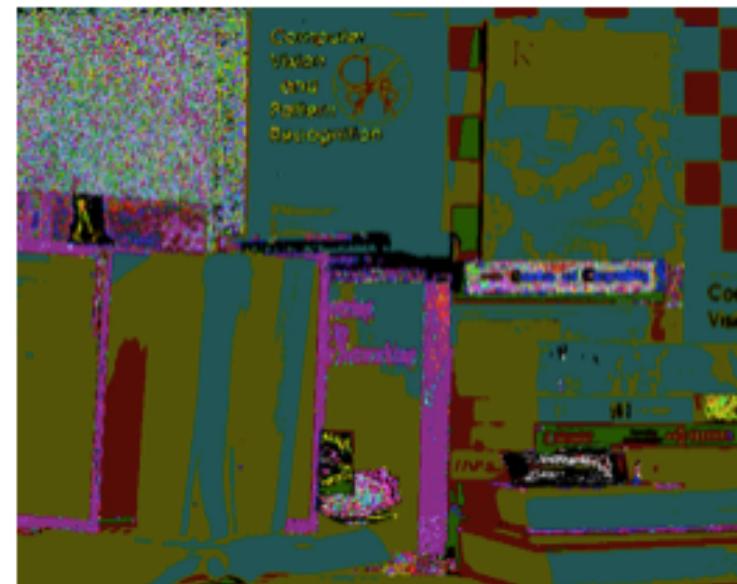
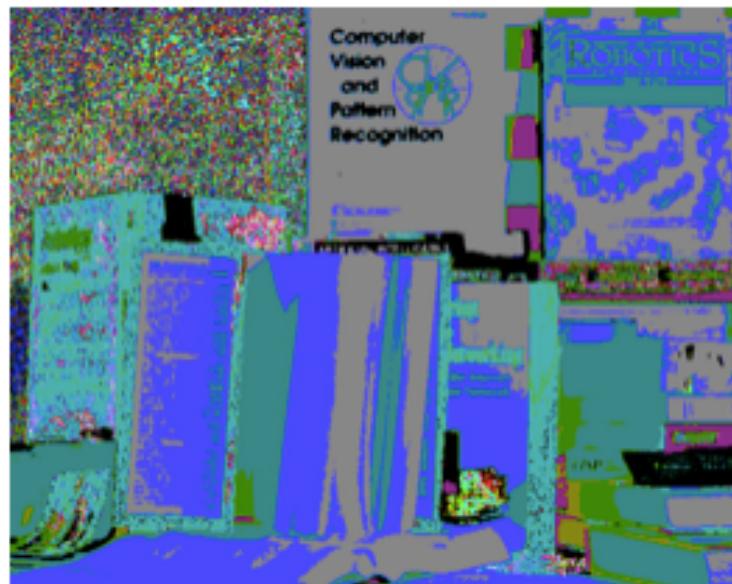
```
int kBands = 8; imageSegmentation.applyUsingCIEXYZPolarThetaThenKMPPThenHistEq(gsImg1,  
kBands);
```



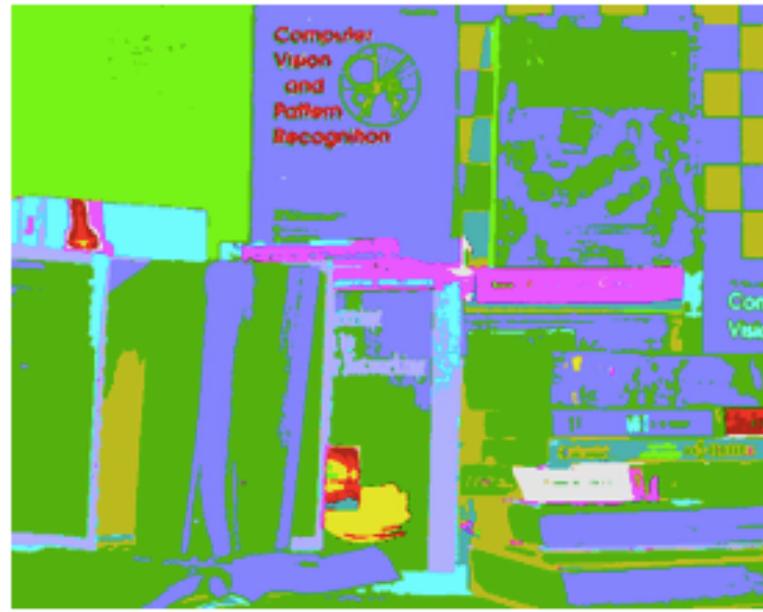
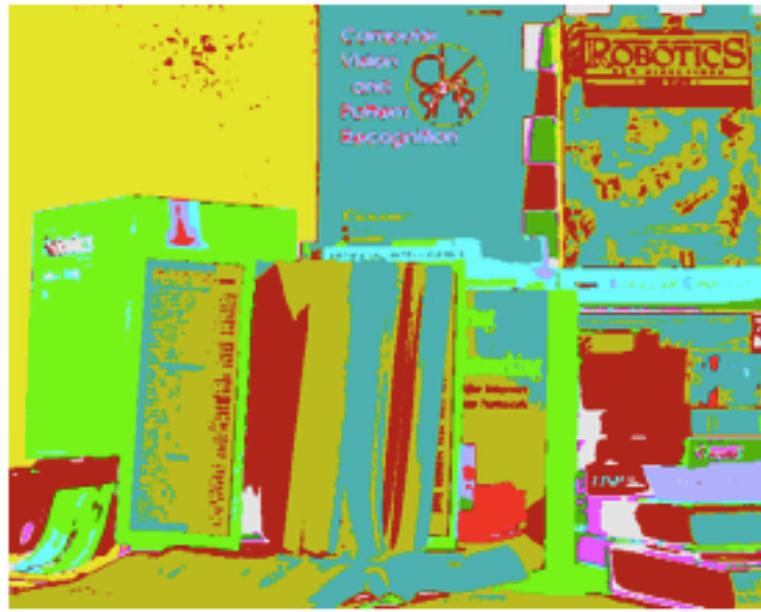
```
imageSegmentation.calculateUsingCIEXYAndClustering(gsImg1, true);
```



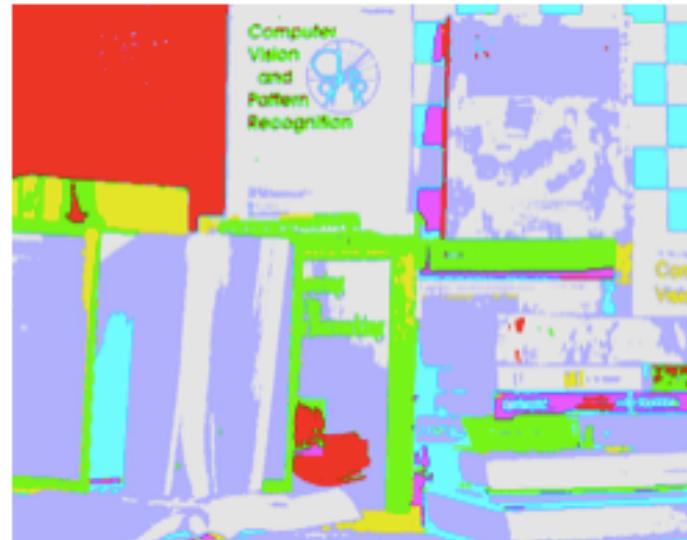
```
imageSegmentation.calculateUsingPolarCIEXYAndClustering(gsImg1, true);
```



```
imageSegmentation.calculateUsingPolarCIEXYAndFrequency(gsImg1, true);
```



```
imageSegmentation.calculateUsingPolarCIEXYAndFrequency(gsImg1, 0.2f, true);
```



```
int kBands = 2; imageSegmentation.applyUsingKMPP(gslImg1, kBands);  
zoom in
```

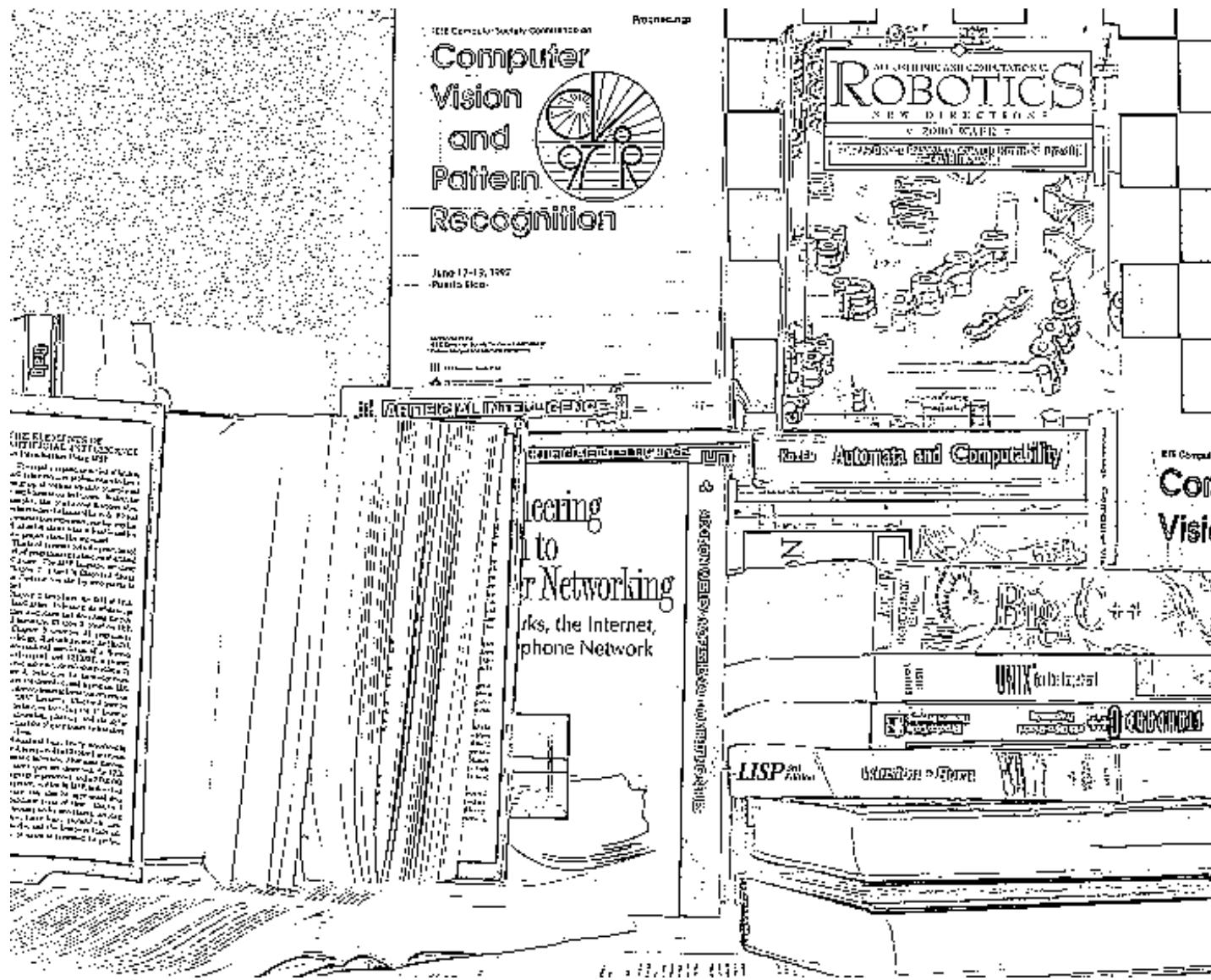
Computer  
Vision  
and  
Pattern  
Recognition



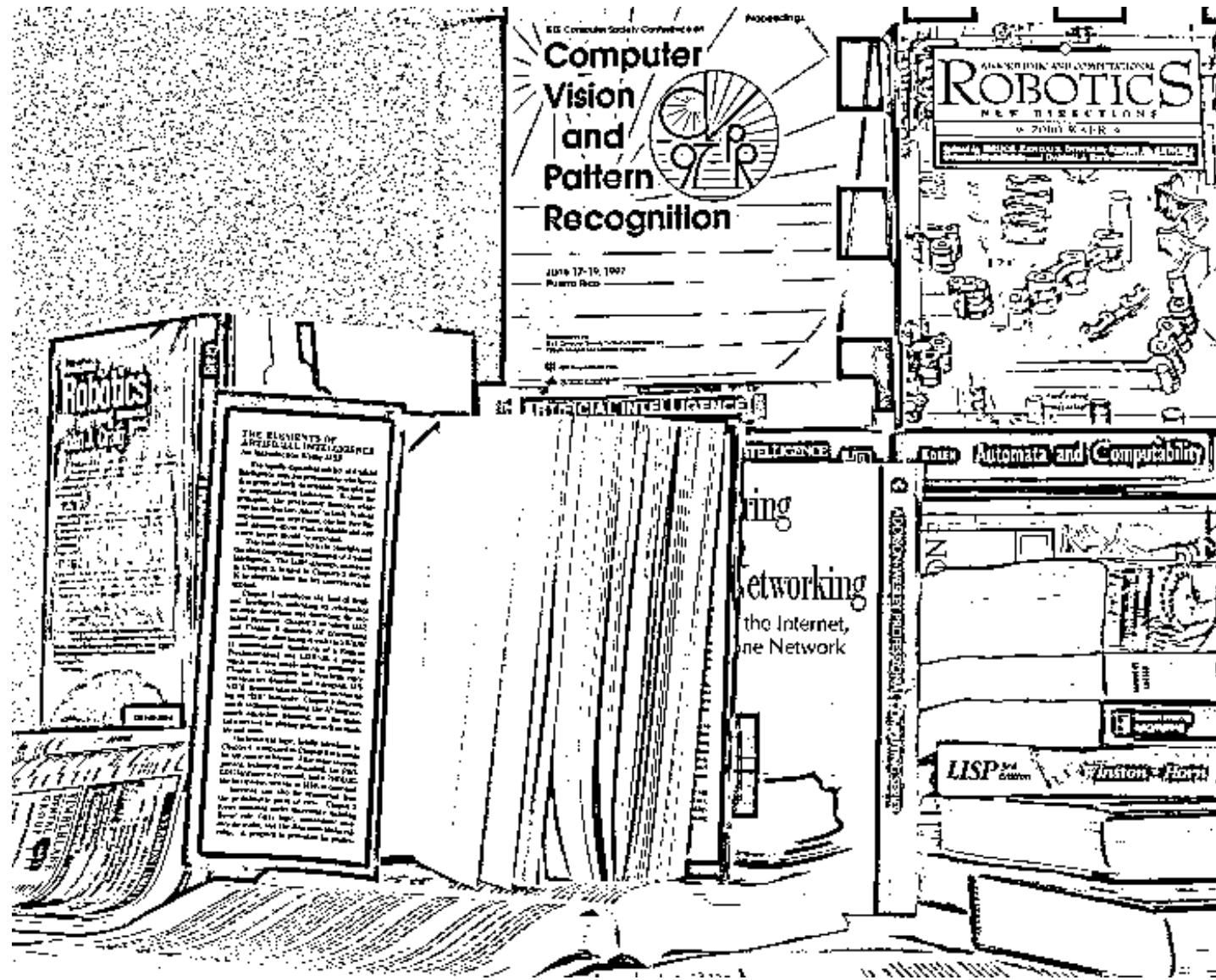
Computer  
Vision  
and  
Pattern  
Recognition



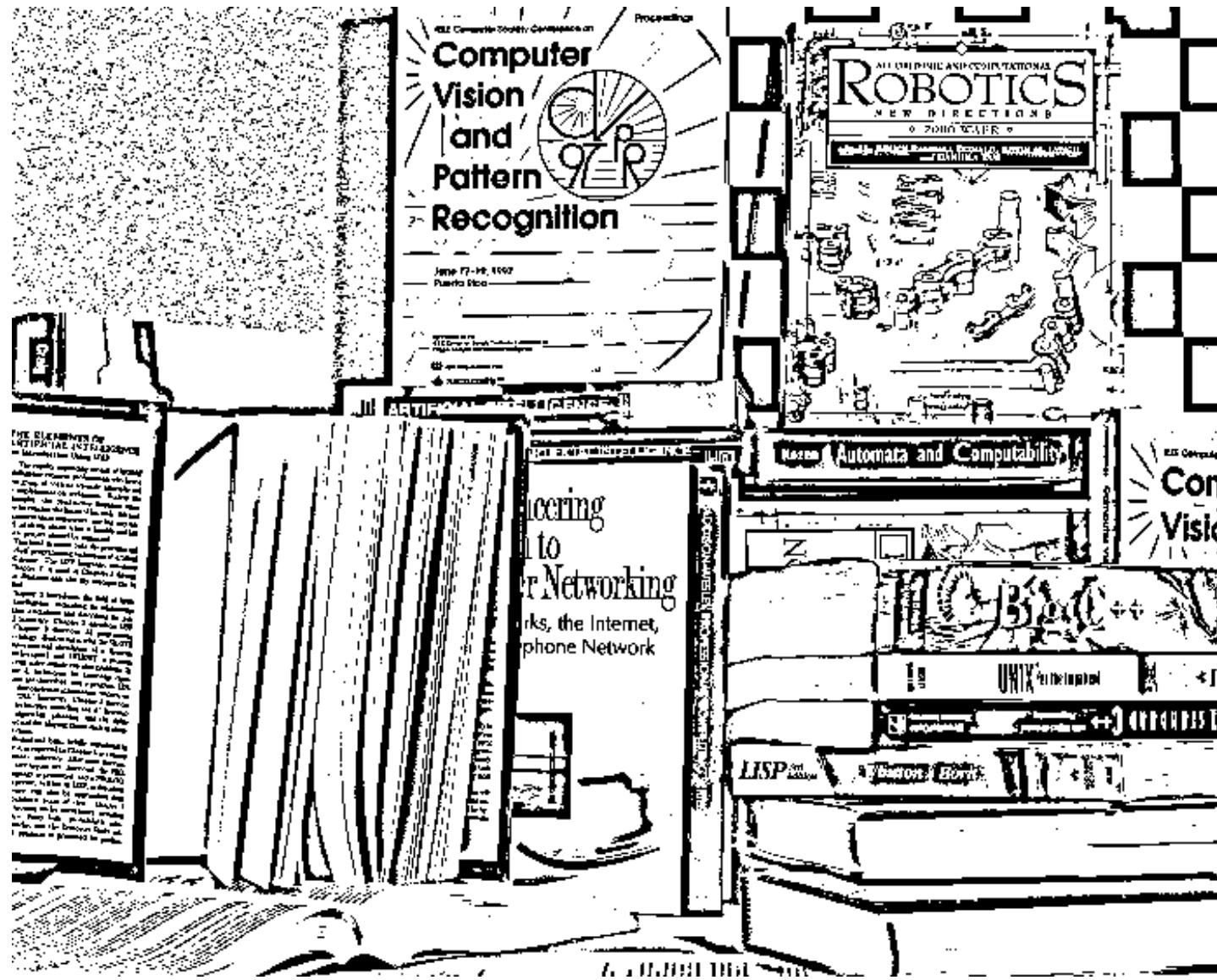
adaptive means,  $h=1$



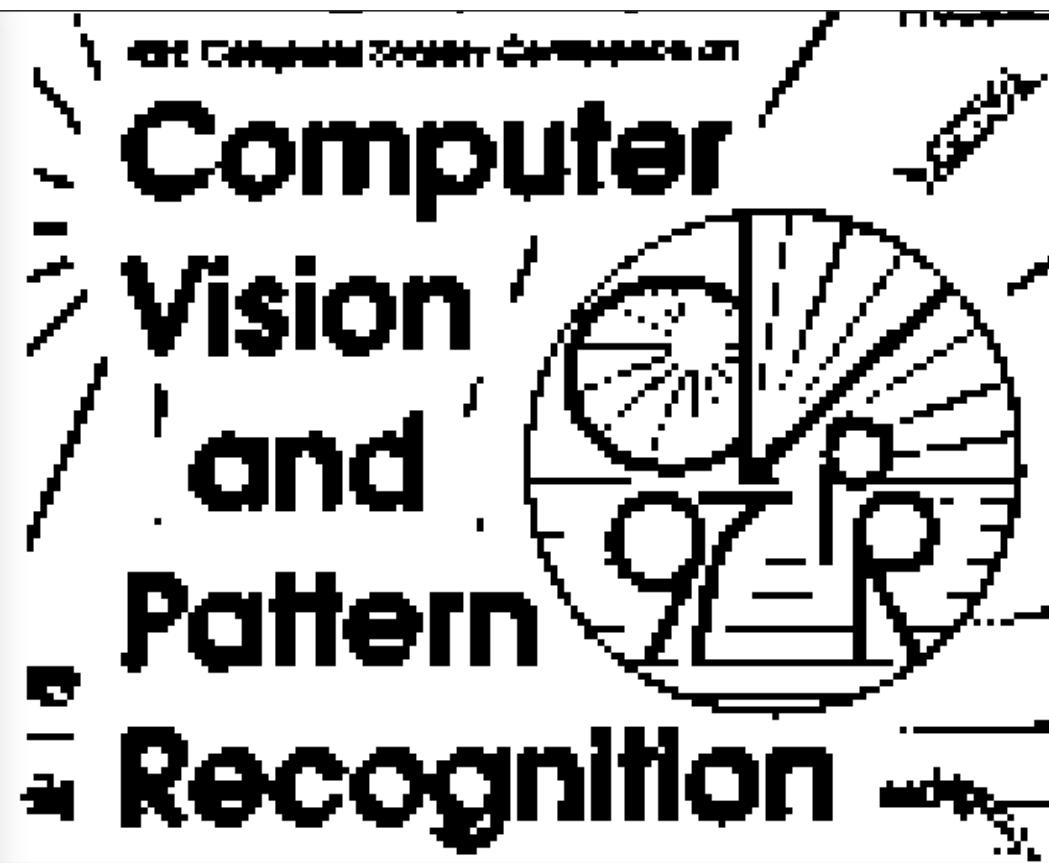
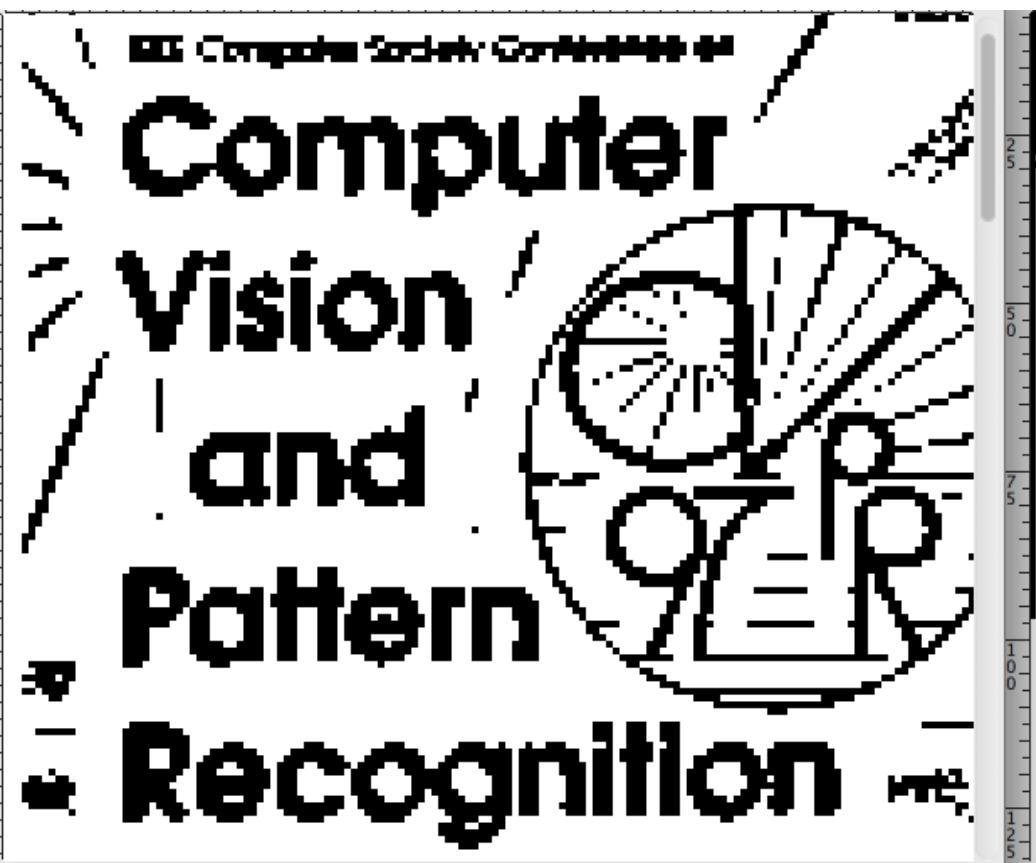
adaptive means, h=3



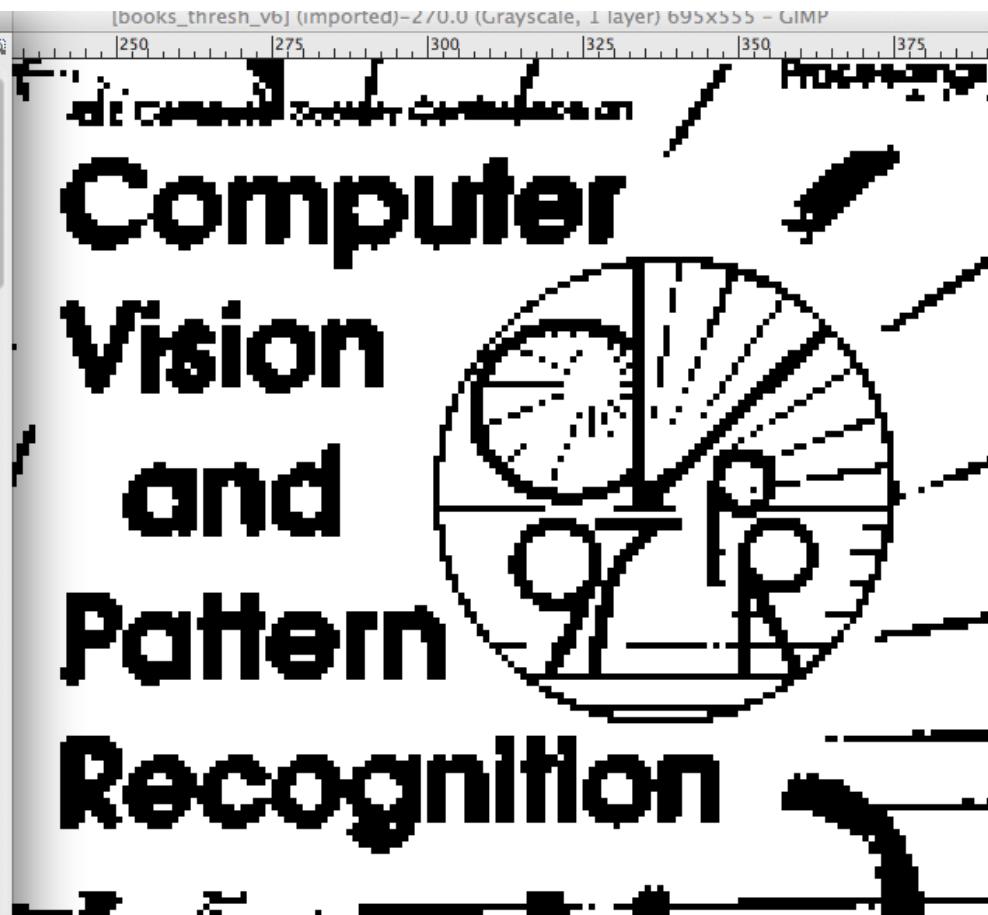
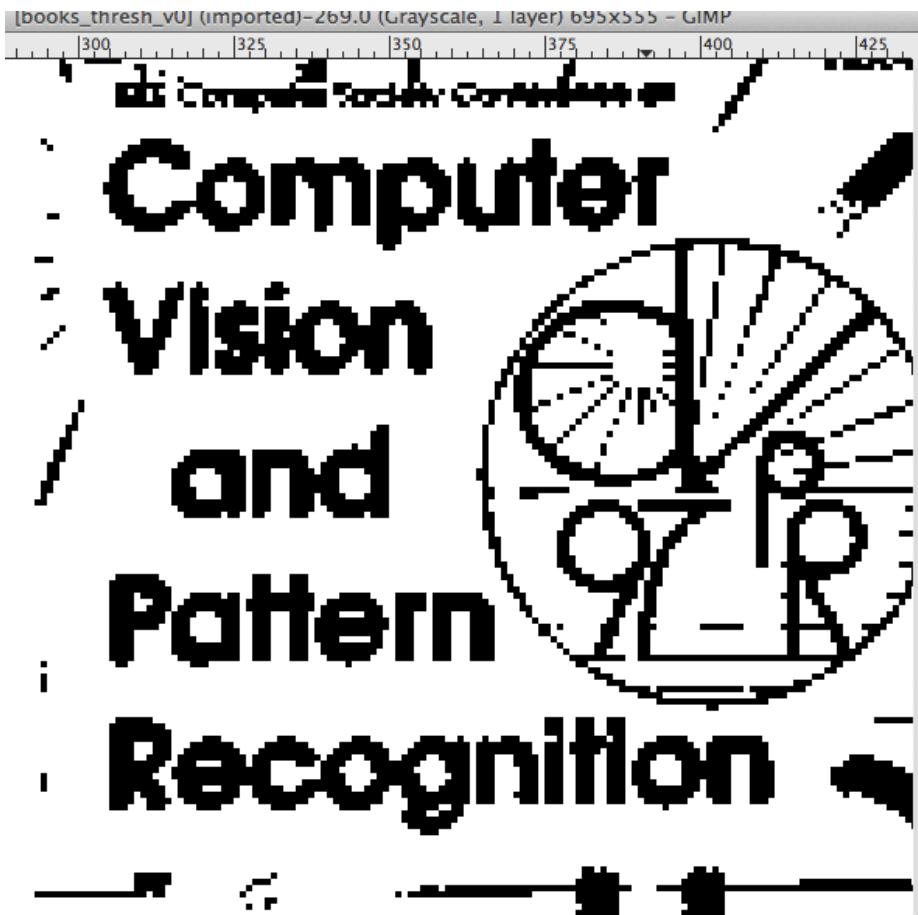
adaptive means, h=5



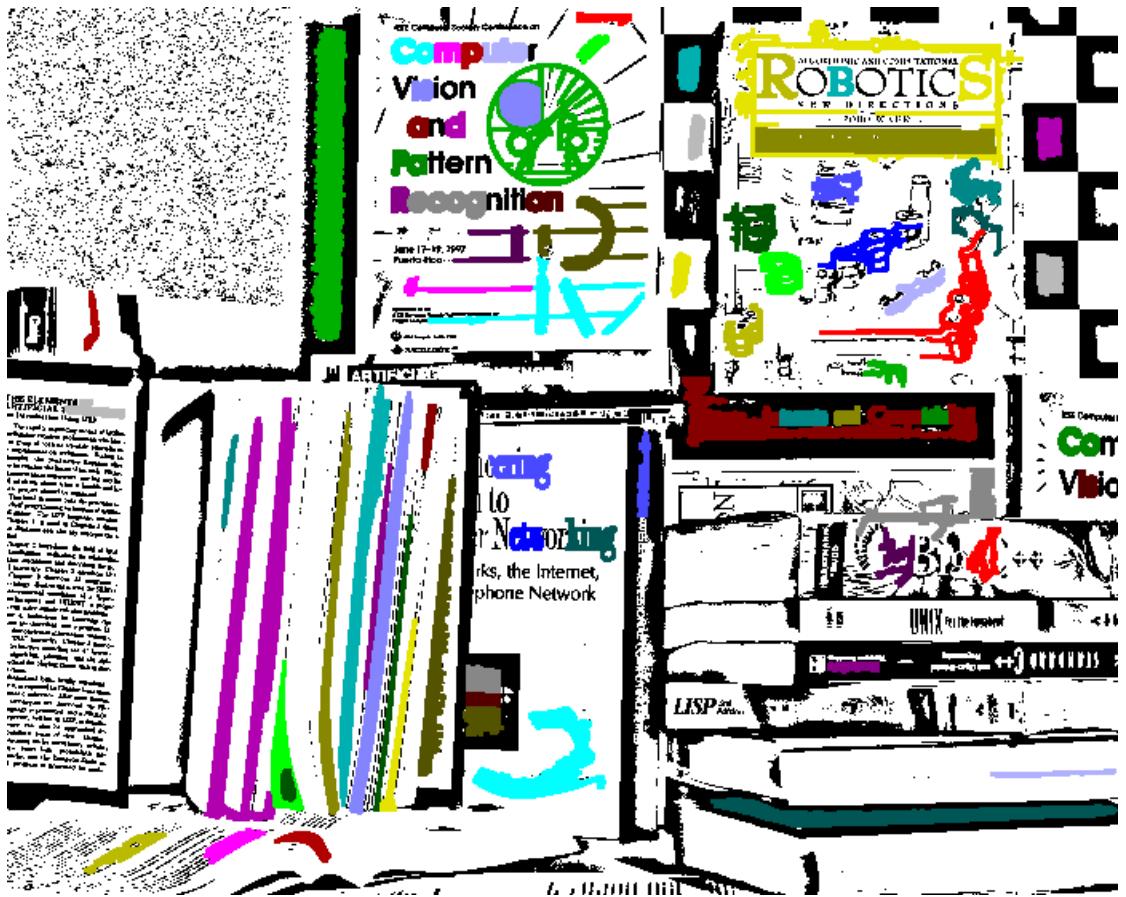
adaptive means,  $h=7$



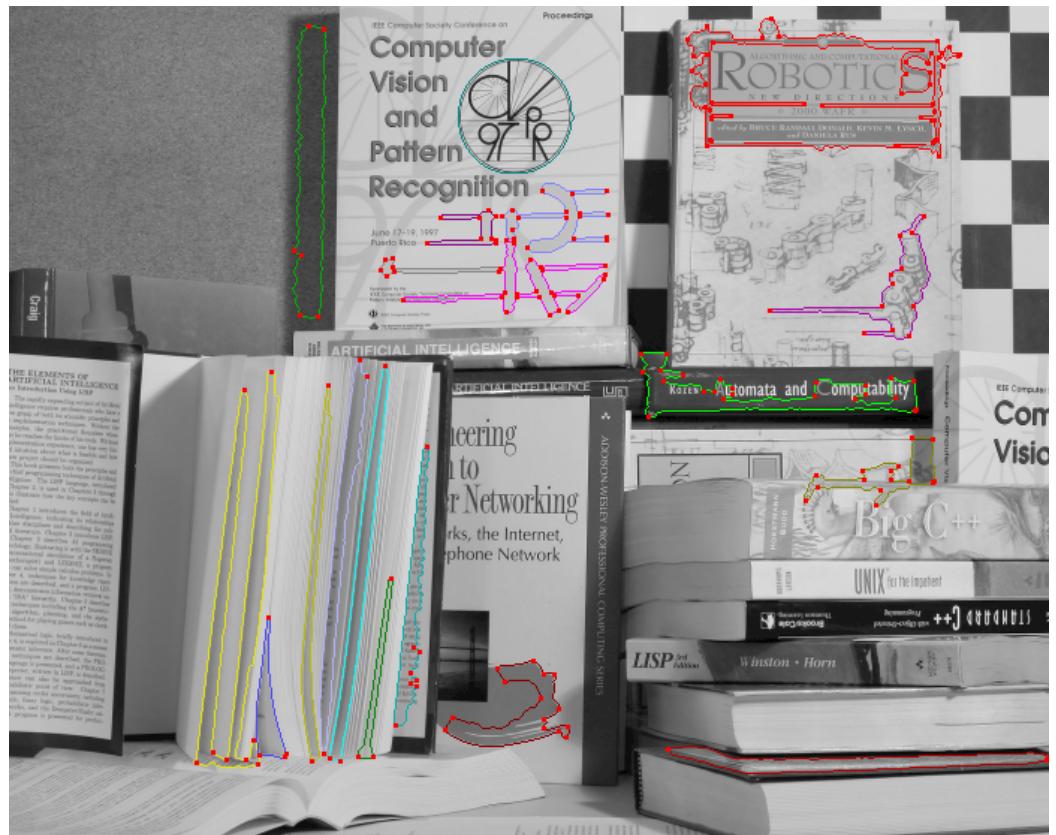
adaptive means, h=11 for adaptive to join close letters



adaptive means, h=11 blobs (extr using scale calc code)

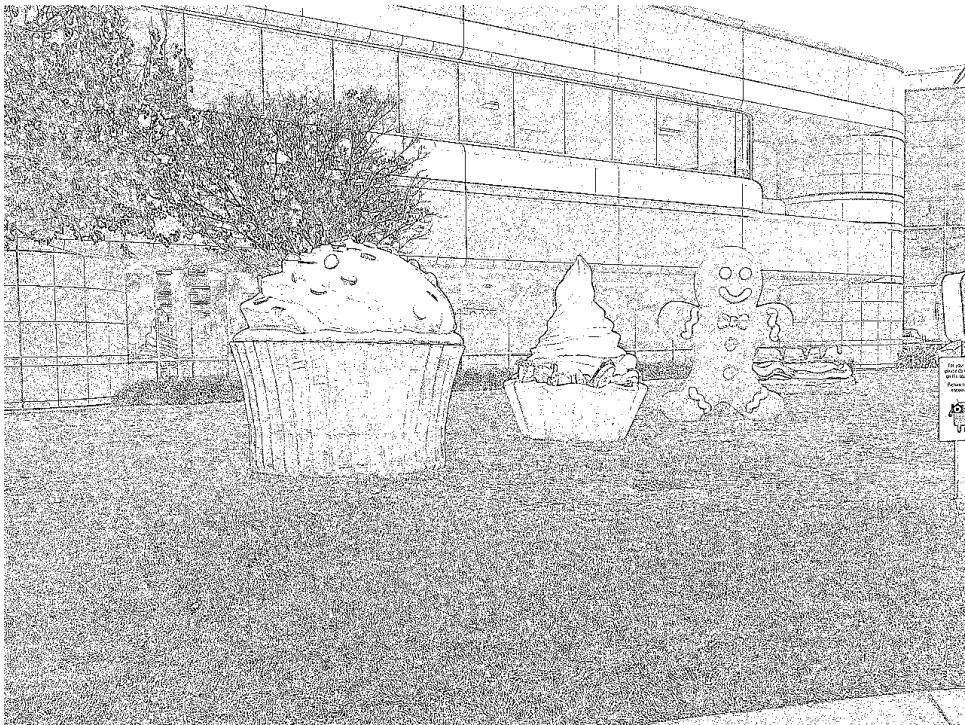


# adaptive means, h=11 blob corners

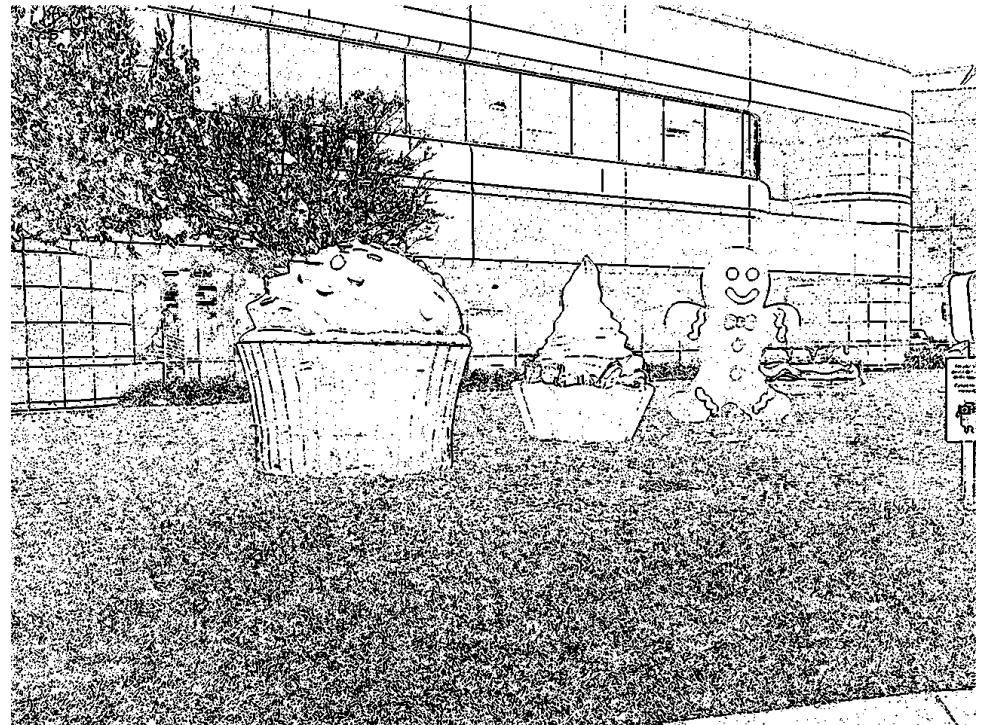


the letters are filtered out due to large nPerimeter compared to nInternal  
adaptive means, h=3 was better for letters as blobs

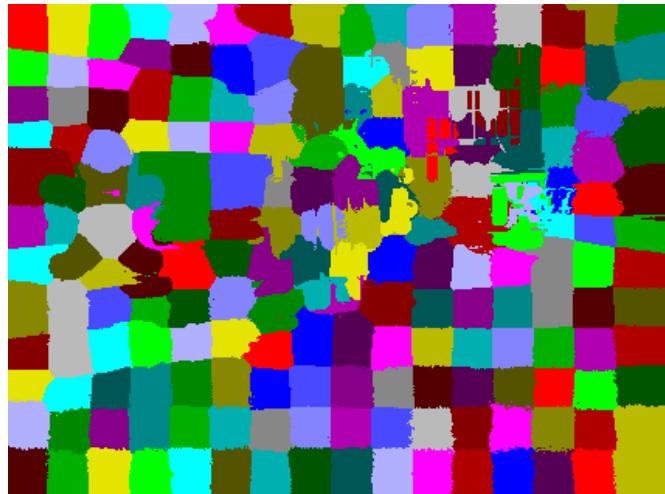
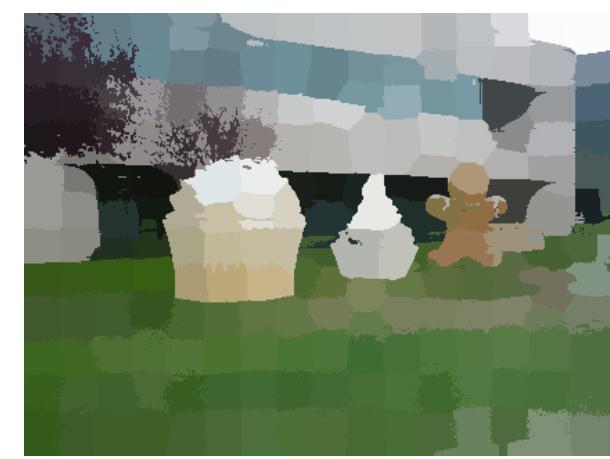
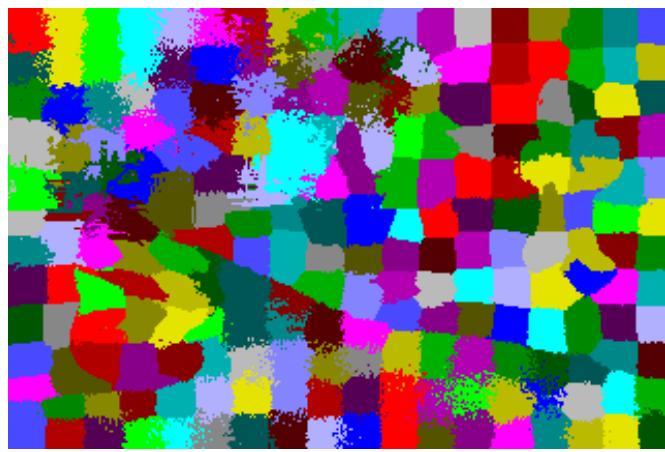
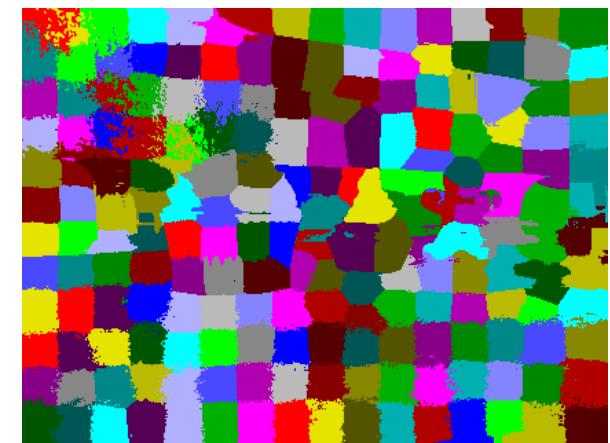
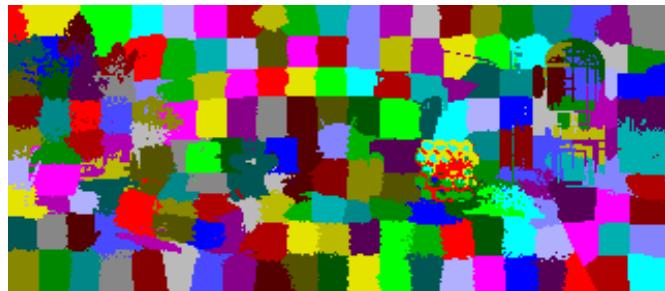
adaptive means, h=1



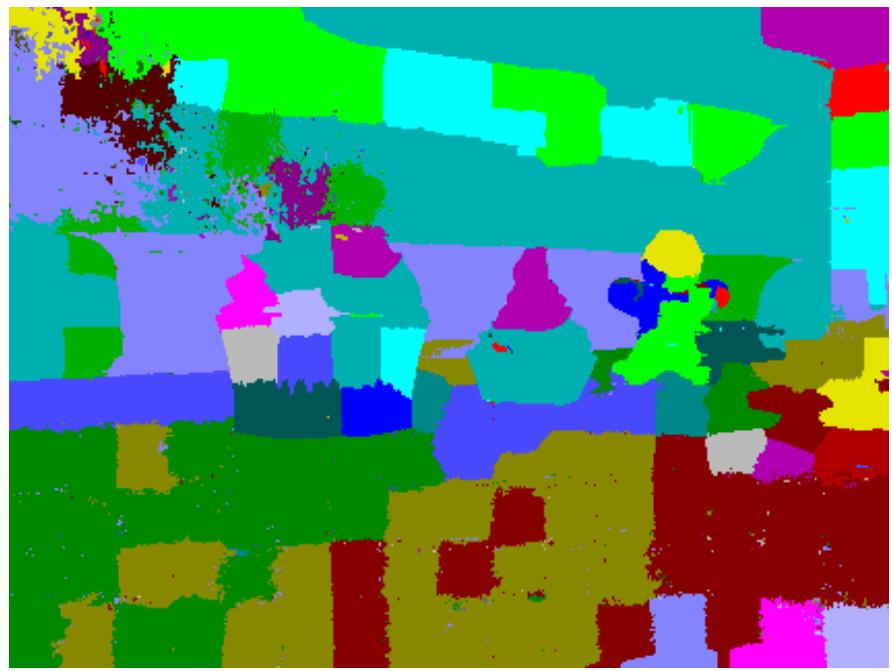
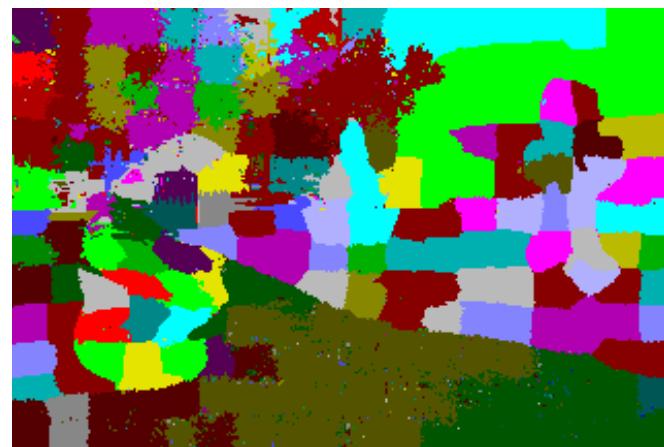
two median smooth with h=2



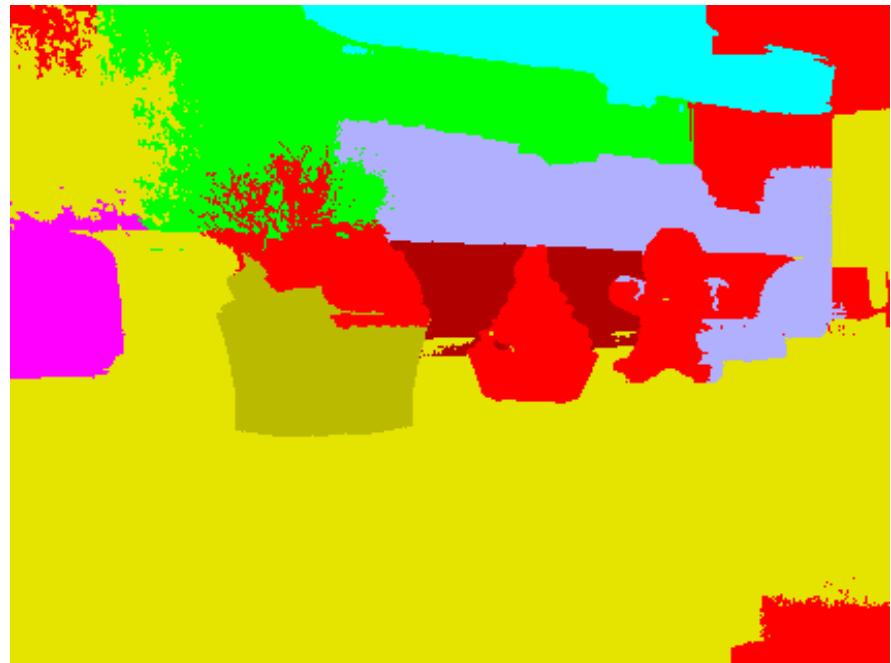
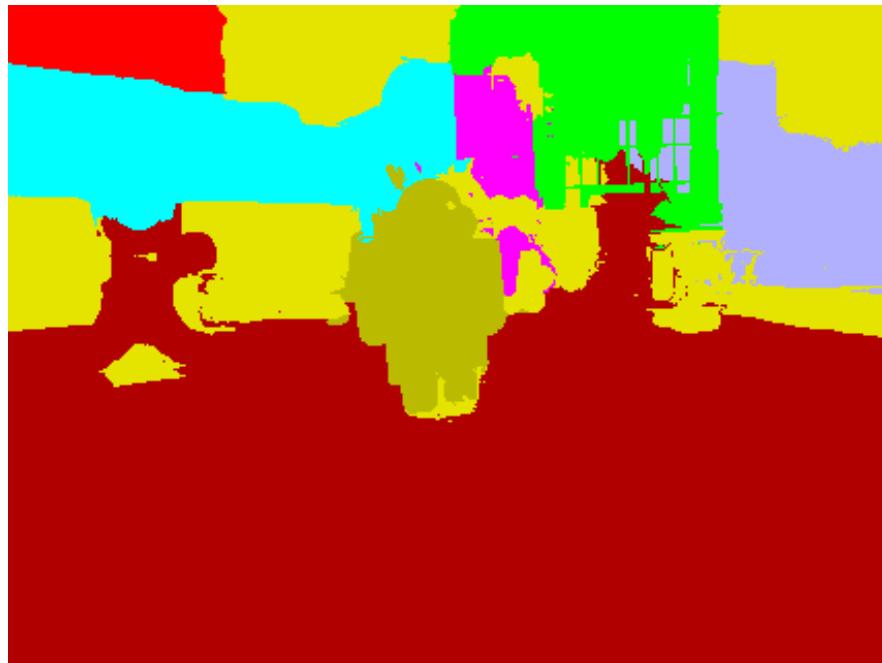
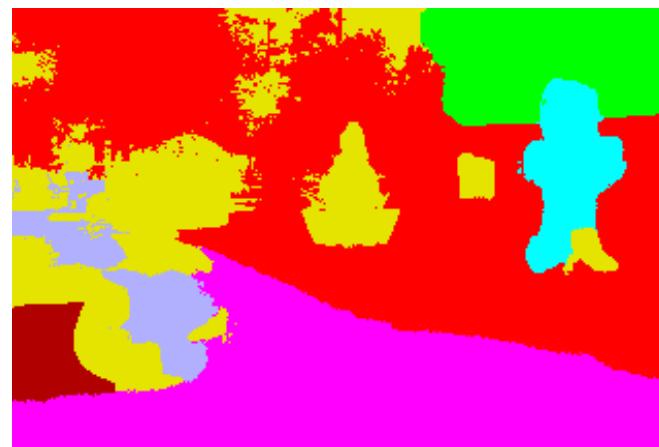
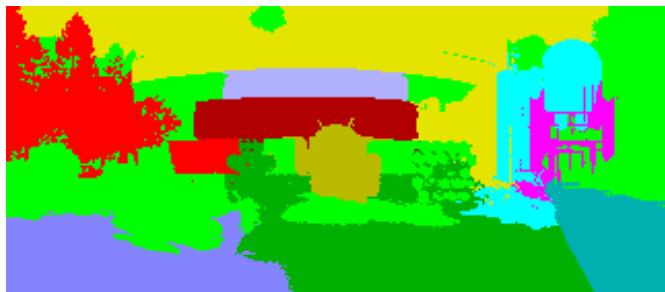
# SLIC super pixels algorithm



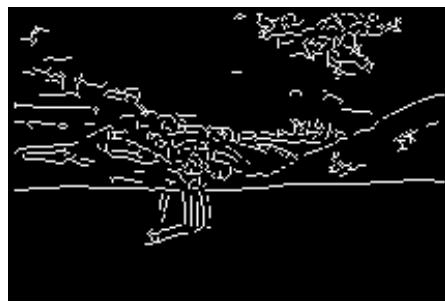
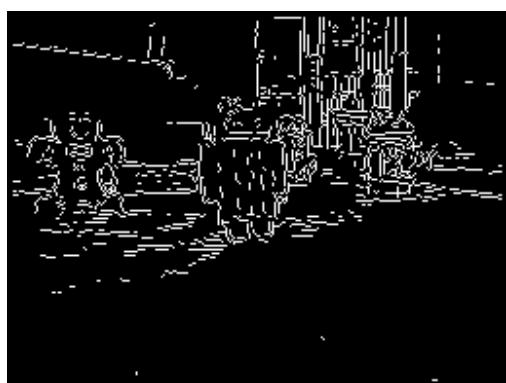
# CIE XY Theta Clustering of the super pixels



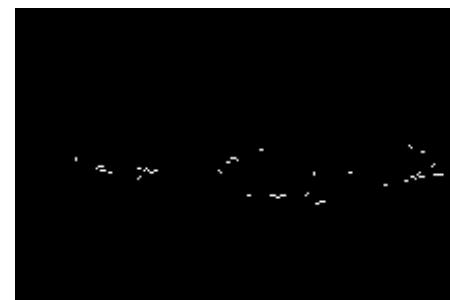
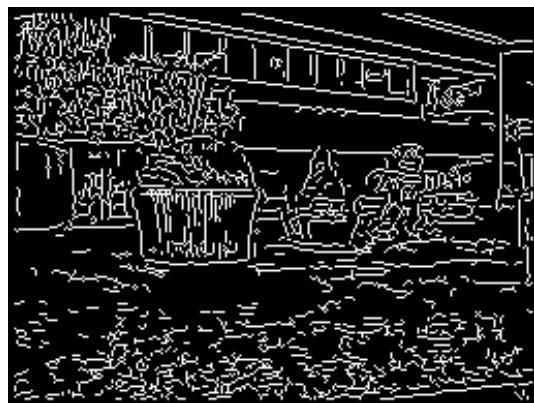
# Normalized Cuts w/ HSV cs on the super pixels



canny greyscale



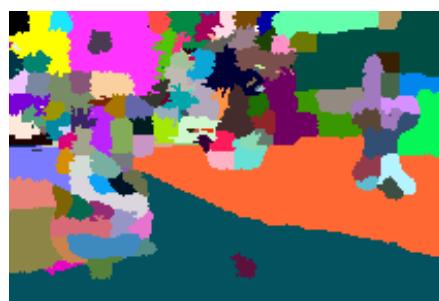
canny deltaE 2000



# phase congruence



# super pixels and moderate merging by HSV color



# Partial Shape Matching of the gingerbread man

extract ordered borders of shapes, blur them by one or two sigma, then ordered bipartite matching algorithm using difference of chords as a descriptor.

