Lab #9

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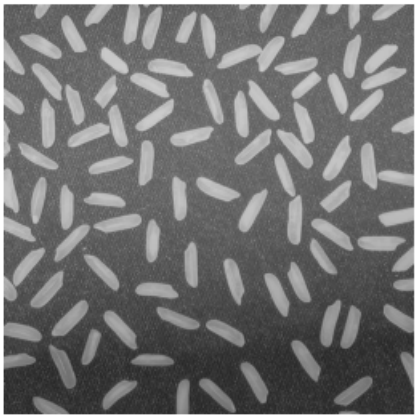
EE146 Section (022)

```
IM=imread('rice.png');
imshow(IM)
```



```
C={[1 2],[2 2],[2 3]};
B={'C(1,2)','C(2,2)','C(2,3)'};
for count=1:3
display(B{count});

[glcms,SI]=graycomatrix(IM, 'offset',C{count});


stats = graycoprops(glcms)



figure
p=imhist(glcms);
p=p/sum(p);
sum(p);
p1=p;
p1(p1==0)=1;
e1=-sum(p.*log2(p1))
e2=entropy(glcms)
imshow(glcms)
end
```

```
C(1,2)
stats = struct with fields:
       Contrast: 0.7025
```

```
    Correlation: 0.8075
         Energy: 0.1384
    Homogeneity: 0.8340
e1 = 0.9993
e2 = 0.9993
```

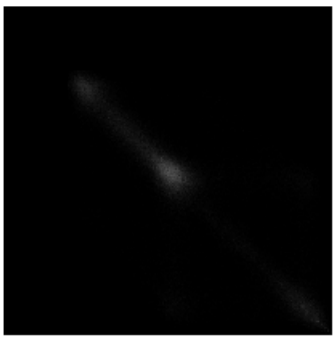
```
C(2,2)
stats = struct with fields:
       Contrast: 0.8668
    Correlation: 0.7622
         Energy: 0.1276
    Homogeneity: 0.8091
e1 = 0.9993
e2 = 0.9993
```

```
C(2,3)
stats = struct with fields:
       Contrast: 1.1274
    Correlation: 0.6907
         Energy: 0.1185
    Homogeneity: 0.7805
e1 = 1
e2 = 1
```

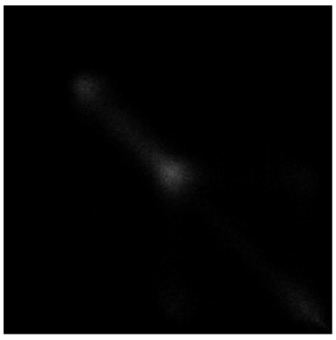
```
size=max(max(IM))+1;
C={[1 2],[2 2],[2 3]};
B={'C(1,2)','C(2,2)','C(2,3)'};
for counter=1:3
m=zeros(size);
d=C{counter};
disp(B{counter})

for x=1:height(IM)-d(1)
for y=1:width(IM)-d(2)

i=x+d(1);
j=y+d(2);
r=IM(x,y);
c=IM(i,j);
m(r+1,c+1)=m(r+1,c+1)+1;
```

```
end
end
figure
imshow(cast(m,'uint8'))
Normm=m/(sum(sum(m)));
end
```

C(1,2)



C(2,2)



C(2,3)