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```
function ks = adaptive_ks(I)
```

Adaptive ks calculator

input:image I output: ks

```
[M,N,Q]=size(I);  
gray = rgb2gray(I);
```

Not enough input arguments.

```
Error in adaptive_ks (line 5)  
[M,N,Q]=size(I);
```

compute entropy

```
E_ent = entropy(gray);
```

compute gray co-occurrence matrix

```
glcm = graycomatrix(gray,'NumLevels',8);  
% normalize  
glcm_norm = glcm/sum(glcm(:));
```

compute energy covirance contrast

```
energy = sum(sum(glcm_norm.^2));  
c_cov = cov(glcm_norm);  
c_cov = sum(c_cov(:));  
  
[x,y]=meshgrid(0:size(glcm_norm,1)-1);  
c_con = sum(sum(((x-y).^2).*glcm_norm));
```

calculate complexity T

```
T = E_ent + c_con-energy-c_cov;  
ks = ceil((M+N)/T);  
  
end
```

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