

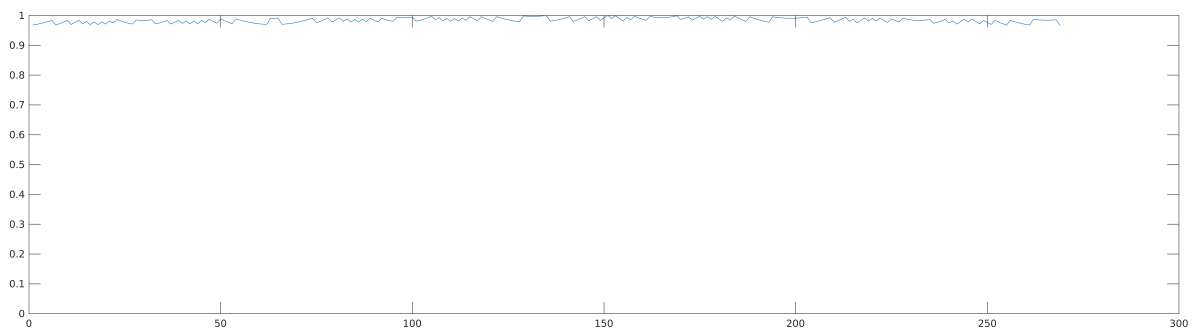
```
I = readmeta(1);  
imshow(I)
```



```
displayChannels(I);
```



```
red = splitColor(I);  
raux = bwareafilt(red, 1);  
  
[numPeaks, sign] = shapeSignature(raux, 0.04);  
plot(sign)  
ylim([0 1])
```



```
numPeaks
```

```
numPeaks = 0
```

```
shapeDiff = max(sign) - min(sign)
```

```
shapeDiff = 0.0339
```

```
regionprops(raux, 'Circularity', 'Extent', 'EulerNumber')
```

```
ans = struct with fields:  
Circularity: 0.2961  
EulerNumber: 0  
Extent: 0.2259
```

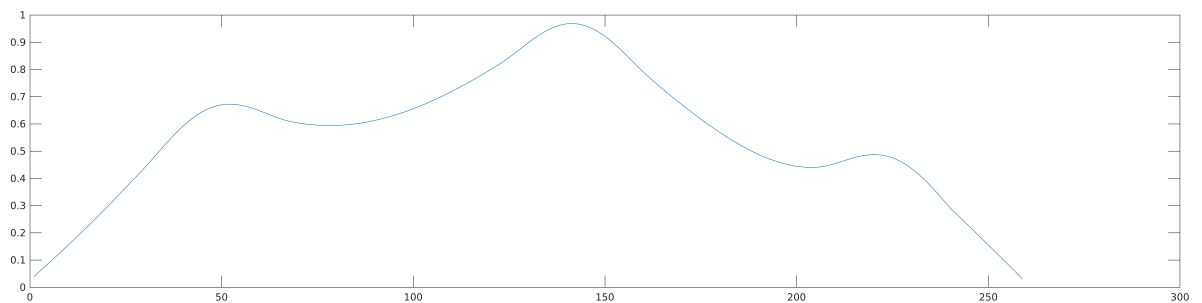
```
I = readmeta(13);  
imshow(I)
```



```
displayChannels(I);
```



```
red = splitColor(I);  
raux = bwareafilt(red, 1);  
  
[numPeaks, sign] = shapeSignature(raux, 0.04);  
plot(sign)  
ylim([0 1])
```



```
numPeaks
```

```
numPeaks = 3
```

```
shapeDiff = max(sign) - min(sign)
```

```
shapeDiff = 0.9388
```

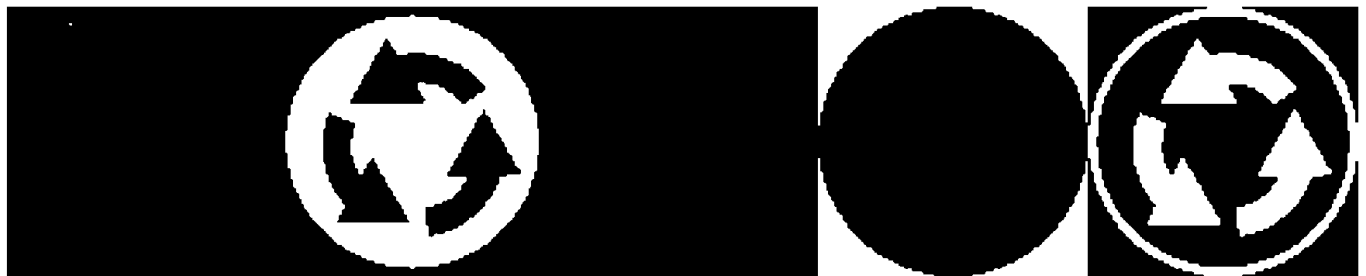
```
regionprops(raux, 'Circularity', 'Extent', 'EulerNumber')
```

```
ans = struct with fields:  
    Circularity: 0.2935  
    EulerNumber: 0  
    Extent: 0.2338
```

```
I = readmeta(40);  
imshow(I)
```



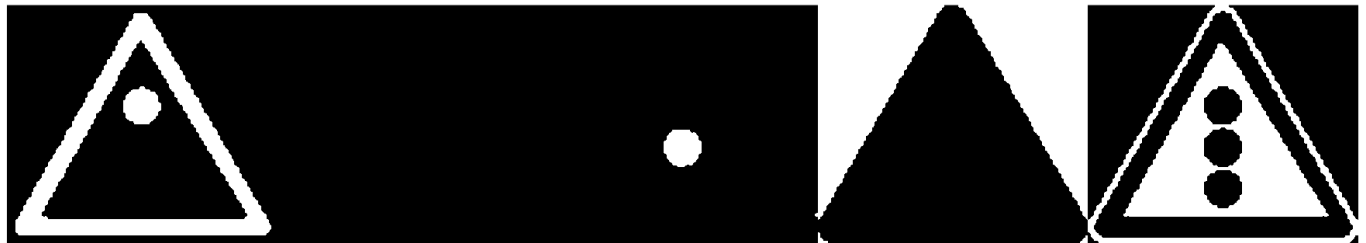
```
displayChannels(I);
```



```
I = readmeta(26);  
imshow(I)
```



```
displayChannels(I);
```



```
I = reading(1, 65, 20);  
imshow(I)
```



```
I = preprocess(I);  
displayChannels(I)
```



```
[red, blue, yellow, black, white] = splitColor(I);  
  
raux = bwareafilt(red, 1);  
  
[numPeaks, sign] = shapeSignature(raux, 0.03);  
numPeaks
```

```
numPeaks = 5
```

```
shapeDiff = max(sign) - min(sign)
```

```
shapeDiff = 0.2639
```

```
regionprops(raux, 'Circularity', 'Extent', 'EulerNumber')
```

```
ans = struct with fields:  
    Circularity: 0.3336  
    EulerNumber: 0  
    Extent: 0.3690
```

```
plot(sign)  
ylim([0 1])
```

