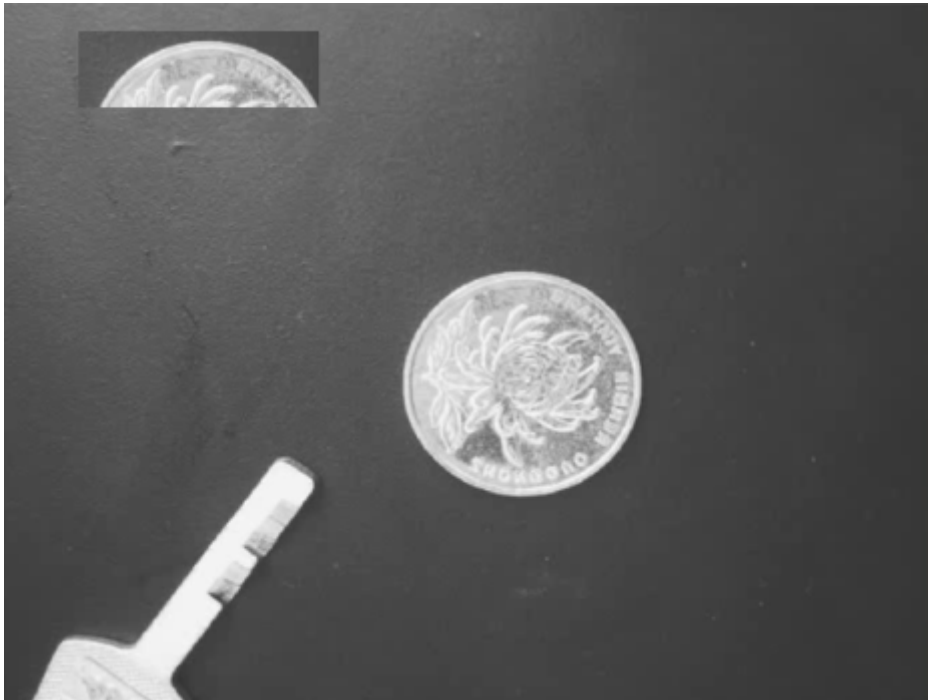


# 机器视觉作业7

SZ170320207

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## 0.初始输入图片



## 1.Halcon代码

```
* Image Acquisition 01: Code generated by Image Acquisition 01
dev_close_window ()
dev_update_window ('off')
read_image (Image, 'D:/OneDrive -
stu.hit.edu.cn/Lessons/Machine_Vision/Homeworks/7/实验图像.bmp')
get_image_size (Image, width, Height)
dev_open_window(0, 0, width, Height, 'black', windowHandle)
dev_display(Image)
threshold (Image, Region, 128, 255)
opening_circle (Region, RegionOpening, 3.5)
connection (RegionOpening, ConnectedRegions)
select_shape (ConnectedRegions, SelectedRegions, 'circularity', 'and', 0.7, 1)
shape_trans (SelectedRegions, RegionTrans, 'outer_circle')
smallest_circle (RegionTrans, Row, Column, Radius)
area_center (RegionTrans, Area, Row1, Column1)
dev_display (Image)
disp_circle (windowHandle, Row, Column, Radius)
disp_message (windowHandle, 'Position:('+Column+', '+Row+')', 'window', Row,
Column, 'black', 'true')
disp_message (windowHandle, 'Area: '+Area, 'window', Row+15, Column, 'black',
'true')
```

```
disp_message (windowHandle, 'Diameter:'+2*Radius, 'window', Row+30, Column,  
'black', 'true')  
dev_update_window ('on') //更新窗体
```

## 2.结果

