```
WSRDP_example ym@hqu
```

#### CITE:

@article{yan2022lightweight,

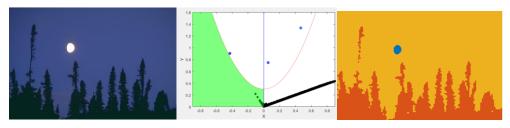
title={A lightweight weakly supervised learning segmentation algorithm for imbalanced image based on rotation density peaks},

author={Yan, Ming and Chen, Yewang and Chen, Yi and Zeng, Guoyao and Hu, Xiaoliang and Du, Jixiang},

```
journal={Knowledge-Based Systems},
volume={244},
pages={108513},
year={2022},
publisher={Elsevier}
}
```

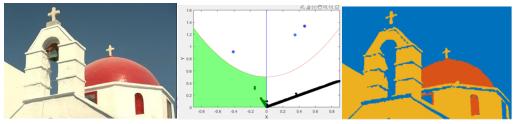
**1.Most** of the test sets that need to monitor small objects can use the weak parameters trained in the paper. Like:

### 238001 (RunTimes 10s)



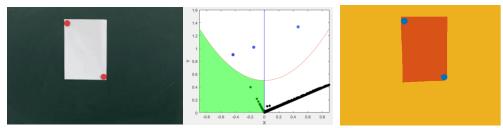
```
object_parameter = 1
superpix = 1
dc = 1
feaExtra = 1
```

## 118035 (RunTimes 10s)



```
object_parameter = 1
superpix = 1
dc = 1
feaExtra = 1
```

# blackboard1 (RunTimes 10s)



object\_parameter = 1

superpix = 1

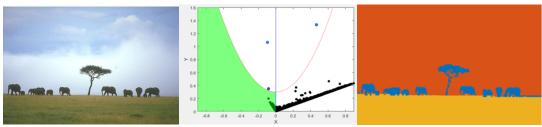
dc = 1

feaExtra = 1

In such images, WSRDP can recognize small objects normally (because the objects are small relative to the total image pixels).

**2. For** relatively large small-objects of images, parameter ' $\underline{object\_parameter} = \underline{0}$  can be used.

## 53036 (RunTimes 10s)



object\_parameter = 0

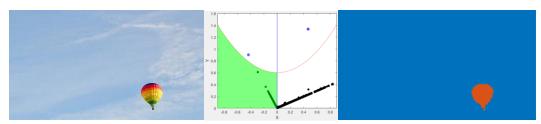
superpix = 1

dc = 1

feaExtra = 1

**3.Also**, different ways of feature extraction can be used. For example, RGB, or a combination of other features (HSV+LAB). However, it may take more computing time.

## ballon3.png(RunTimes 50s)



object\_parameter = 0

superpix = 1

dc = 0.01

feaExtra = 3