

## Comparison of Masked RCNN with Resnet101 backbone with Mobilenet backbone

The implementation of Masked RCNN with Resnet101 shows exceptionally good performance in image segmentation as compared to Mobilenet implementation in MRCNN which can be because of the inadequate training of the Mobilenet backbone system.

However, a Mobilenet shows an improvement in time for detection which can be shown by the following snippets from the detection times

### Masked RCNN with Resnet101 backbone

```
Processing 1 images
image          shape: (5578, 3490, 3)      min:  0.00000  max: 255.00000  uint8
molded_images   shape: (1, 1024, 1024, 3)   min: -123.70000 max: 151.10000  float64
image metas     shape: (1, 14)              min:  0.00000  max: 5578.00000  float64
anchors         shape: (1, 261888, 4)       min:  -0.17695  max:  1.11439   float32
elapsed time for detection: 1.034863s
```

### Masked RCNN with Mobilenet backbone

```
Processing 1 images
image          shape: (2106, 2985, 3)      min:  0.00000  max: 255.00000  uint8
molded_images   shape: (1, 1024, 1024, 3)   min: -123.70000 max: 148.10000  float64
image metas     shape: (1, 14)              min:  0.00000  max: 2985.00000  float64
anchors         shape: (1, 261888, 4)       min:  -0.17695  max:  1.11439   float32
elapsed time for detection: 0.483558s
```