

# Intersection over Union

$$IoU = \frac{\text{Area of Overlap}}{\text{Area of Union}}$$

Ground truth



(4,271),(4,384),(61,271),(61,384)

TensorFlow object detection API (SSD\_RESNET50)



(8,269),(8,381),(54,269),(54,381)

$$\frac{5060}{6533} = 0.77$$

Correlation filter and minimum output sum of squared error



(13,252),(13,404),(63,252),(63,404)

$$\frac{5424}{8617} = 0.63$$