

**Anchor Box 1**

$X_1$	$Y_1$	$W_1$	$H_1$	$BS_1$
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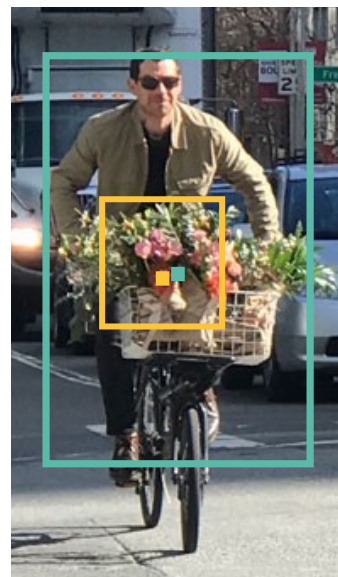
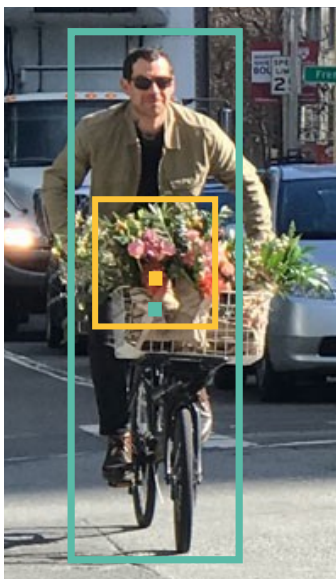
**Anchor Box 2**

$X_2$	$Y_2$	$W_2$	$H_2$	$BS_2$
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### DICTIONARY

- X: Anchor box center coordinates in x axis normalized.
- Y: Anchor box center coordinates in y axis normalized.
- W: Width of the anchor box normalized.
- H: Height of the anchor box normalized.
- BS: Box confidence score.
- CP: Conditional class probability.
- n: number of classes.

$CP_1$	$CP_2$	$CP_3$	...	$CP_n$
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### EXTRA

- Each grid cell will generate two random anchor boxes to predict only one object, even if it has none.
- Doesn't necessarily have to be two anchor boxes (e.g., YOLOv3 predicts 9 anchors per grid cell).
- Only anchors with enough BS will be maintained (e.g. threshold = 0.25).
- Class confidence score =  $CP * BS$ . The class with the highest confidence score will be shown.