

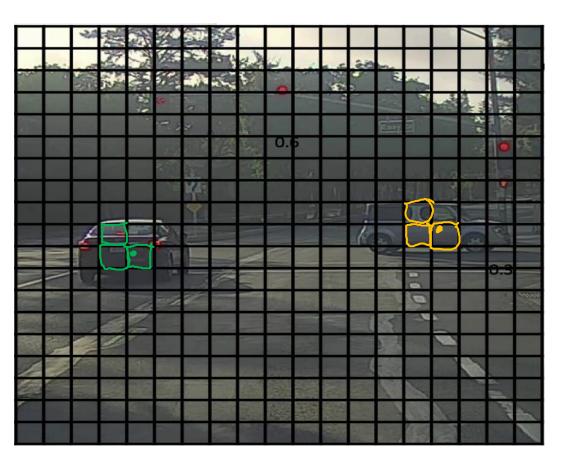
# Object Detection

Non-max suppression

## Non-max suppression example



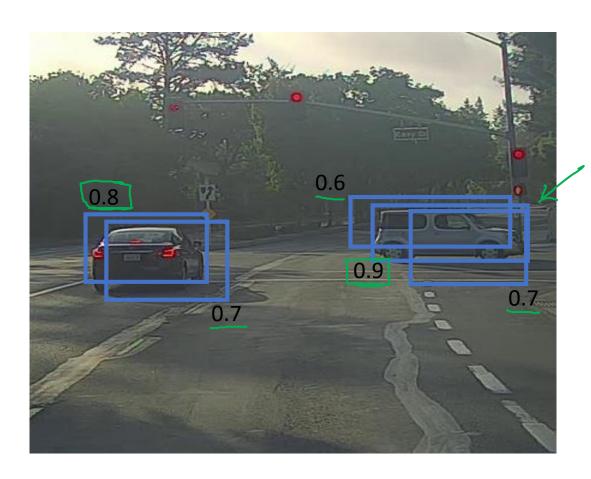
#### Non-max suppression example



19x19

#### Non-max suppression example

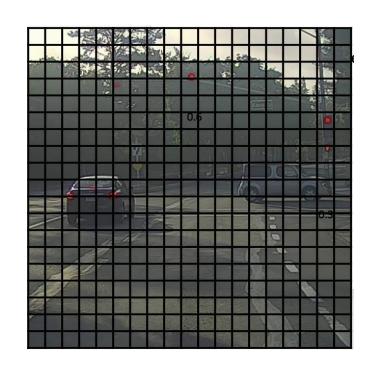
Keep the 0.8 box, remove the 0.7 box



Pc

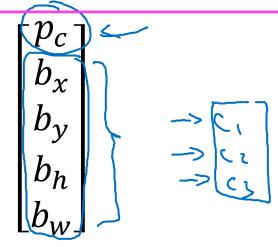
Keep the 0.9 box, remove the 0.7 & 0.6 boxes

### Non-max suppression algorithm



19× 19

Each output prediction is:



Discard all boxes with  $p_c \leq 0.6$ 

While there are any remaining boxes:

- Pick the box with the largest  $p_c$  Output that as a prediction.
- Discard any remaining box with  $IoU \ge 0.5$  with the box output in the previous step