



deeplearning.ai

You've learn about object localization as well as landmark detection. Now let's build up toward to an object detection algorithm. In this video, you'll how to use a ConvNet to perform object detection using called the sliding windows detection algorithm

Object Detection

Object
detection

Car detection example

Training set:

X

y



1



1



1



0



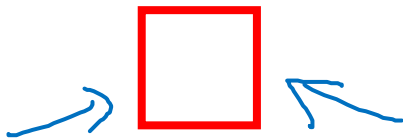
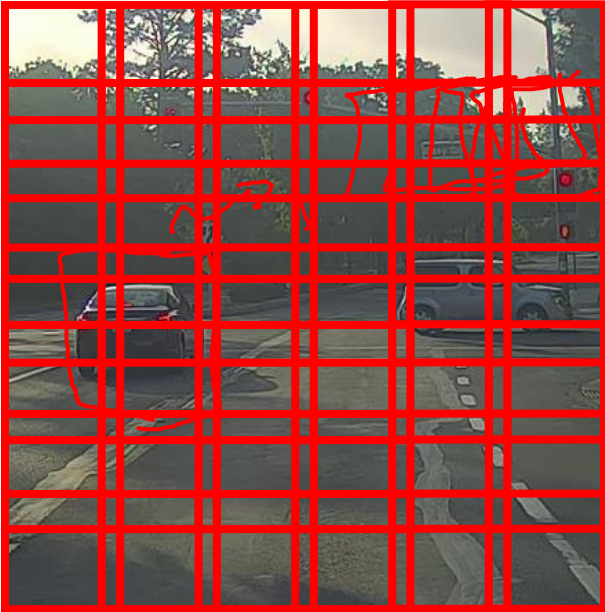
0



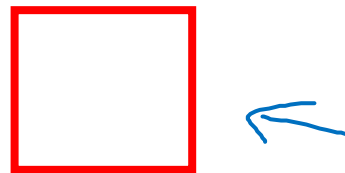
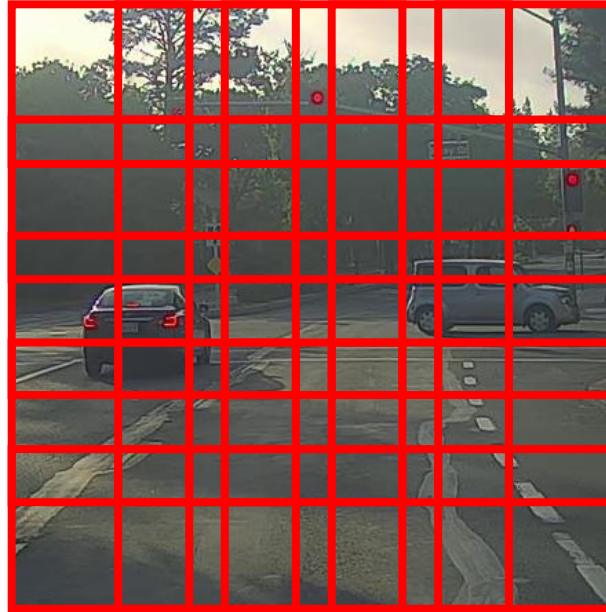
\rightarrow ConvNet $\rightarrow y$

Sliding windows detection

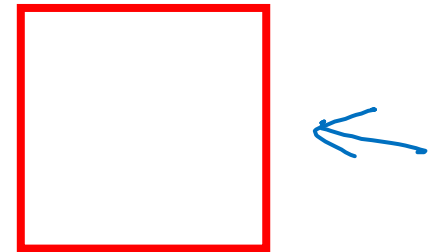
→ ConvNet → 0



→ ConvNet



Computation cost



but that coarse granularity may hurt performance.

but with ConvNet, now running a single classification task is much more expensive, and sliding windows this way is infeasibly slow, and unless you use a very fine granularity or a very small stride, you end up not able to localize the objects that accurately within the image as well.