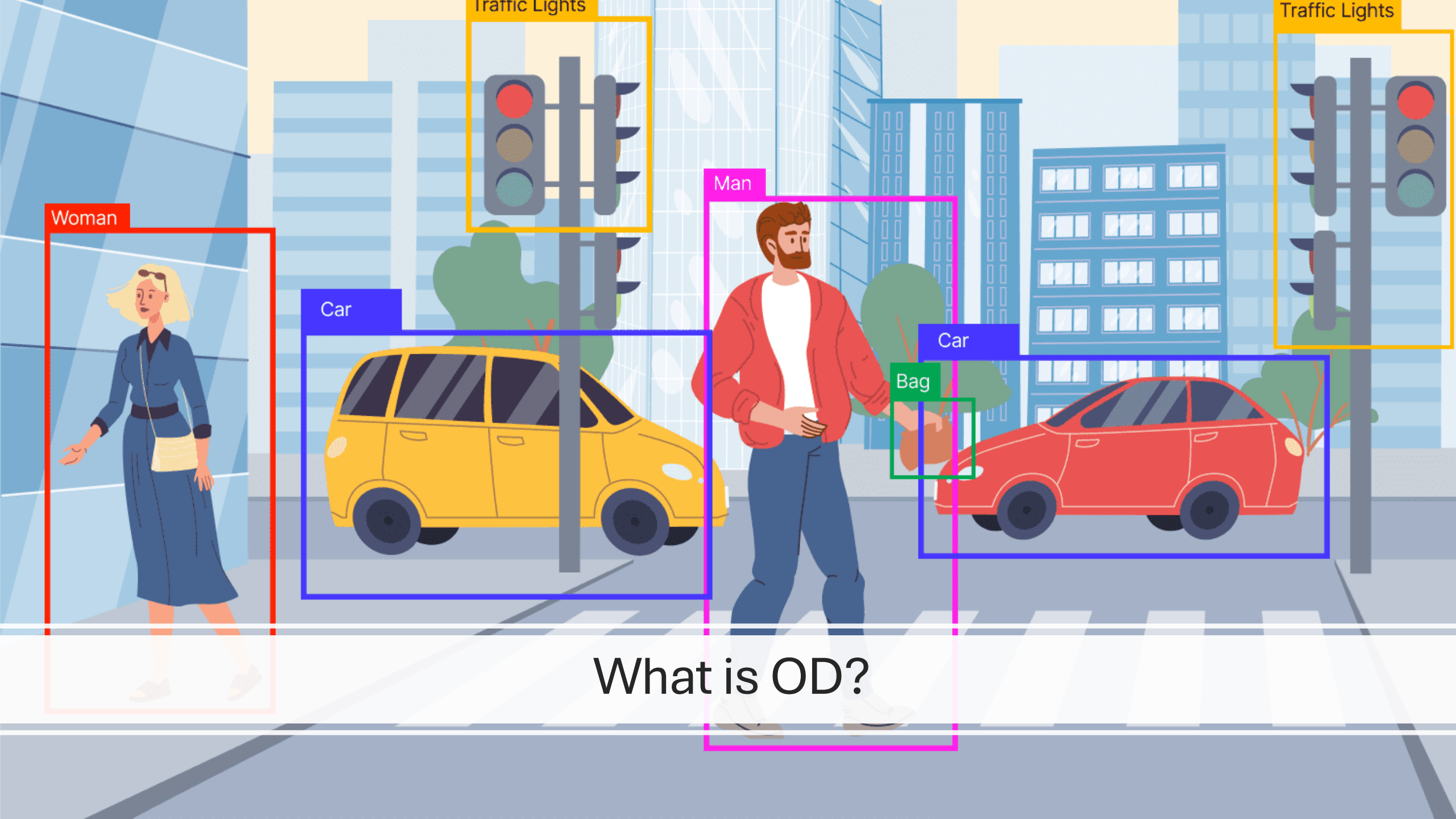


Small Object Detection with SAHI & YOLO



Woman

Car

Traffic Lights

Man

Car

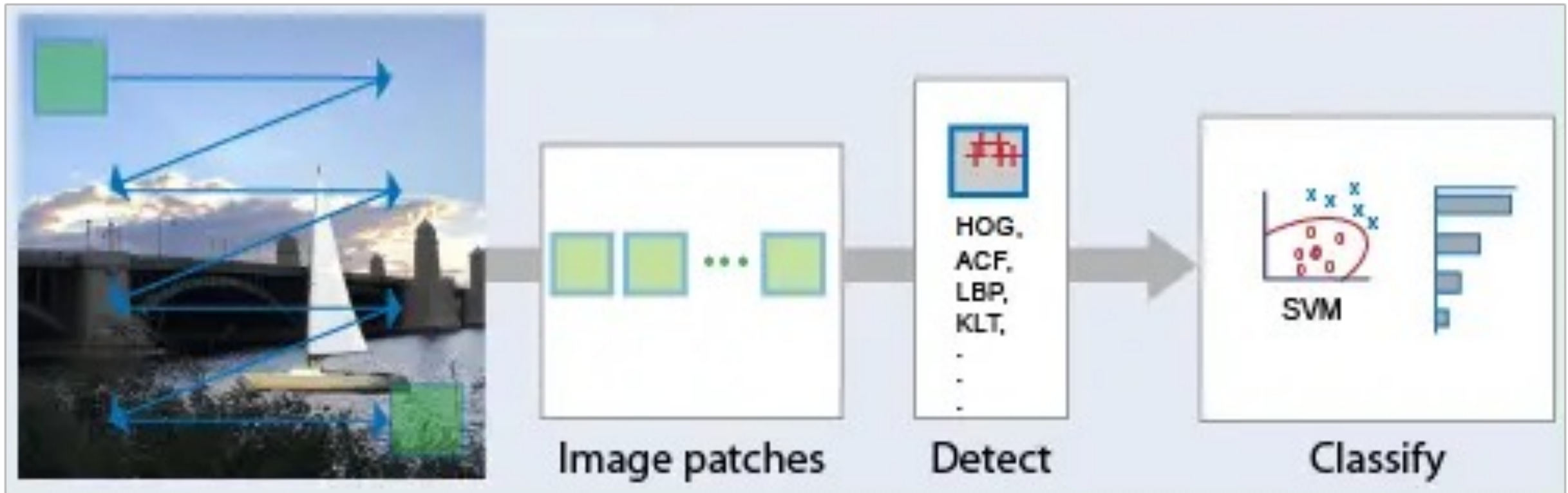
Bag

Traffic Lights

What is OD?

Sliding Window Approach

Sliding Window Detector



Sliding Window Approach



However, the sliding window approach can be **computationally expensive**, especially when dealing with large images or multiple scales

Sliding Window Approach

Disadvantages

TOO MUCH COMPUTATION

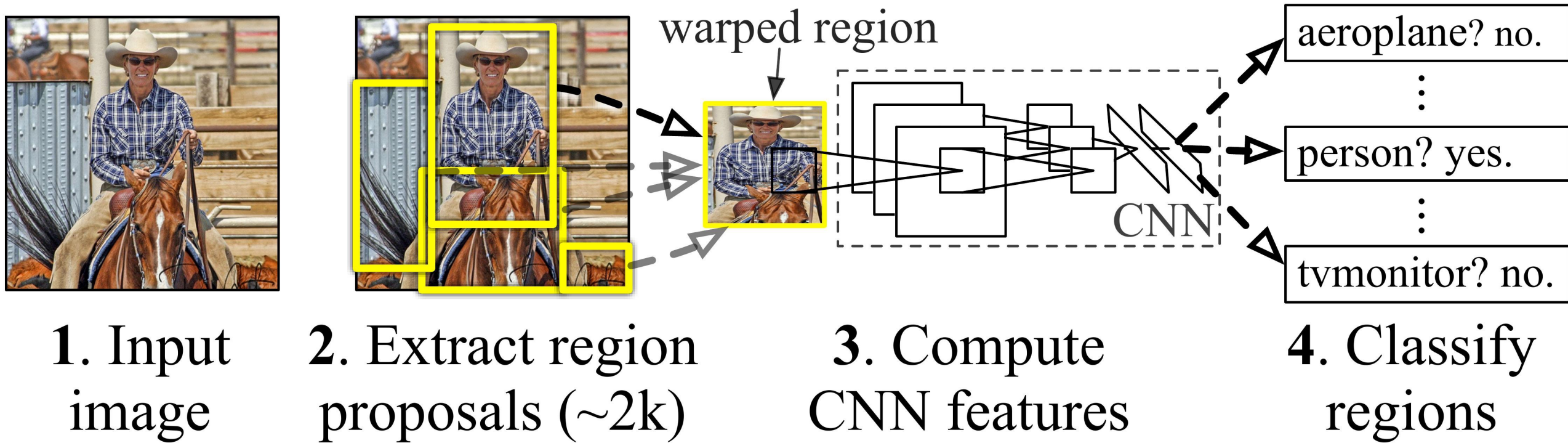


BOUNDING BOXES ARE NOT ACCURATE

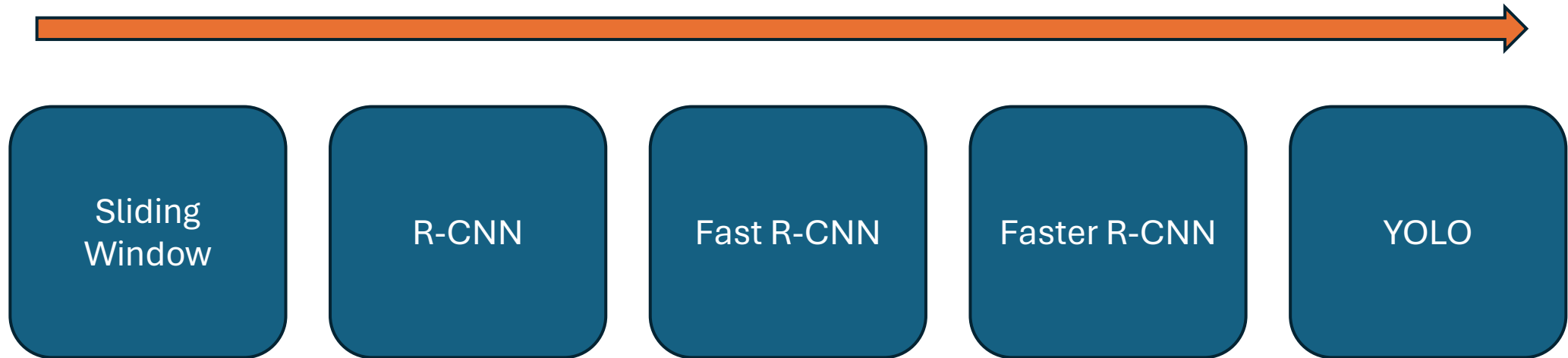


R-CNN

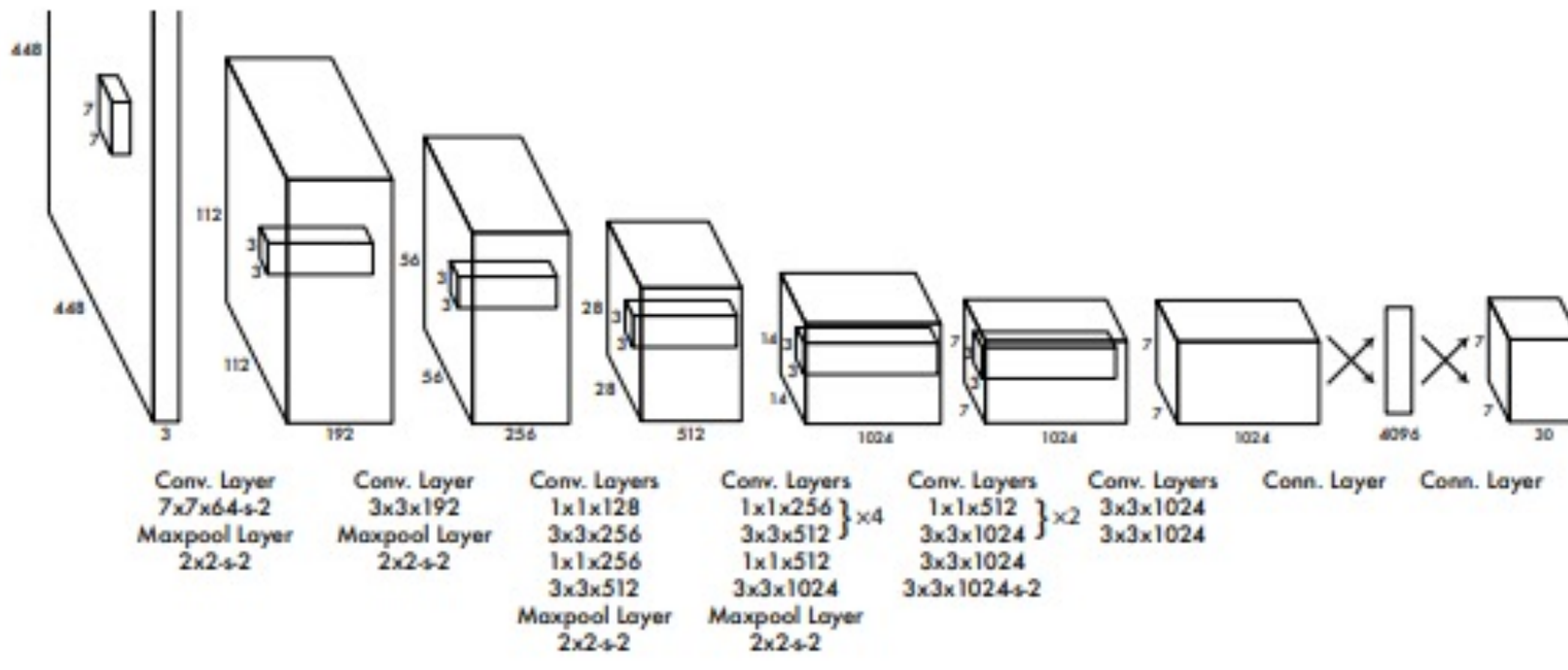
R-CNN: *Regions with CNN features*



And so on....

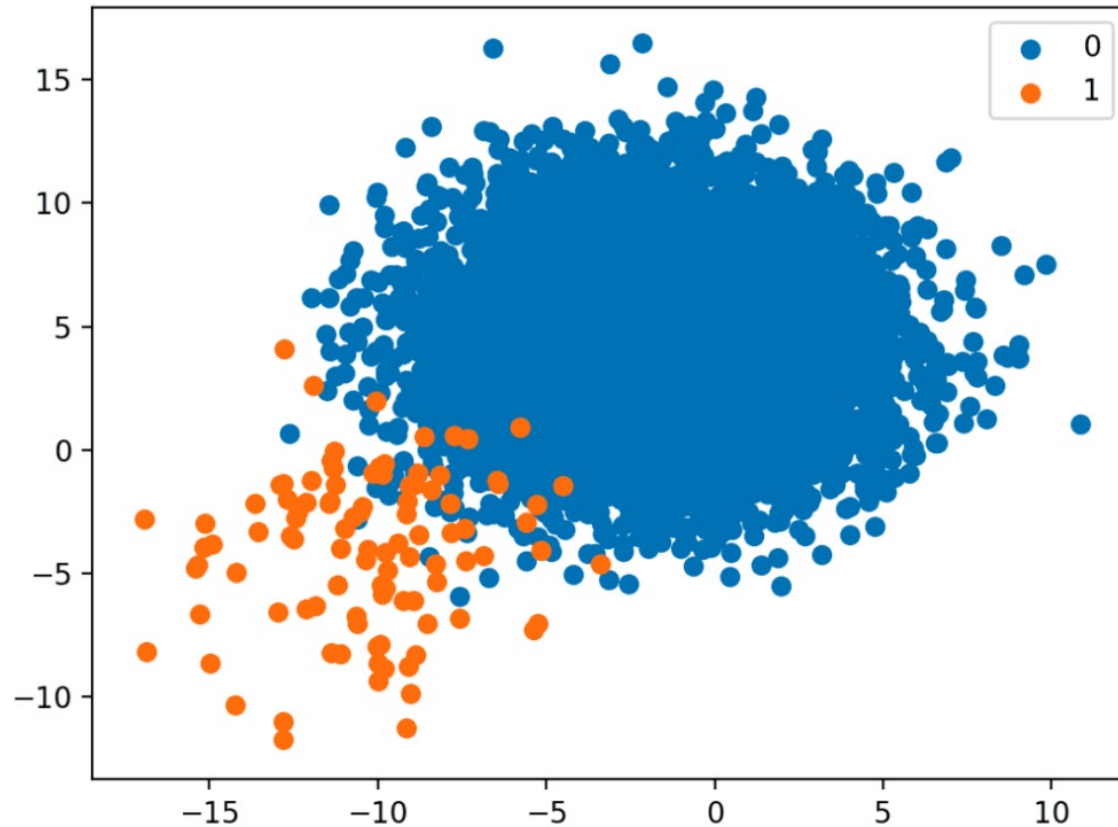


YOLO is SOTA but...



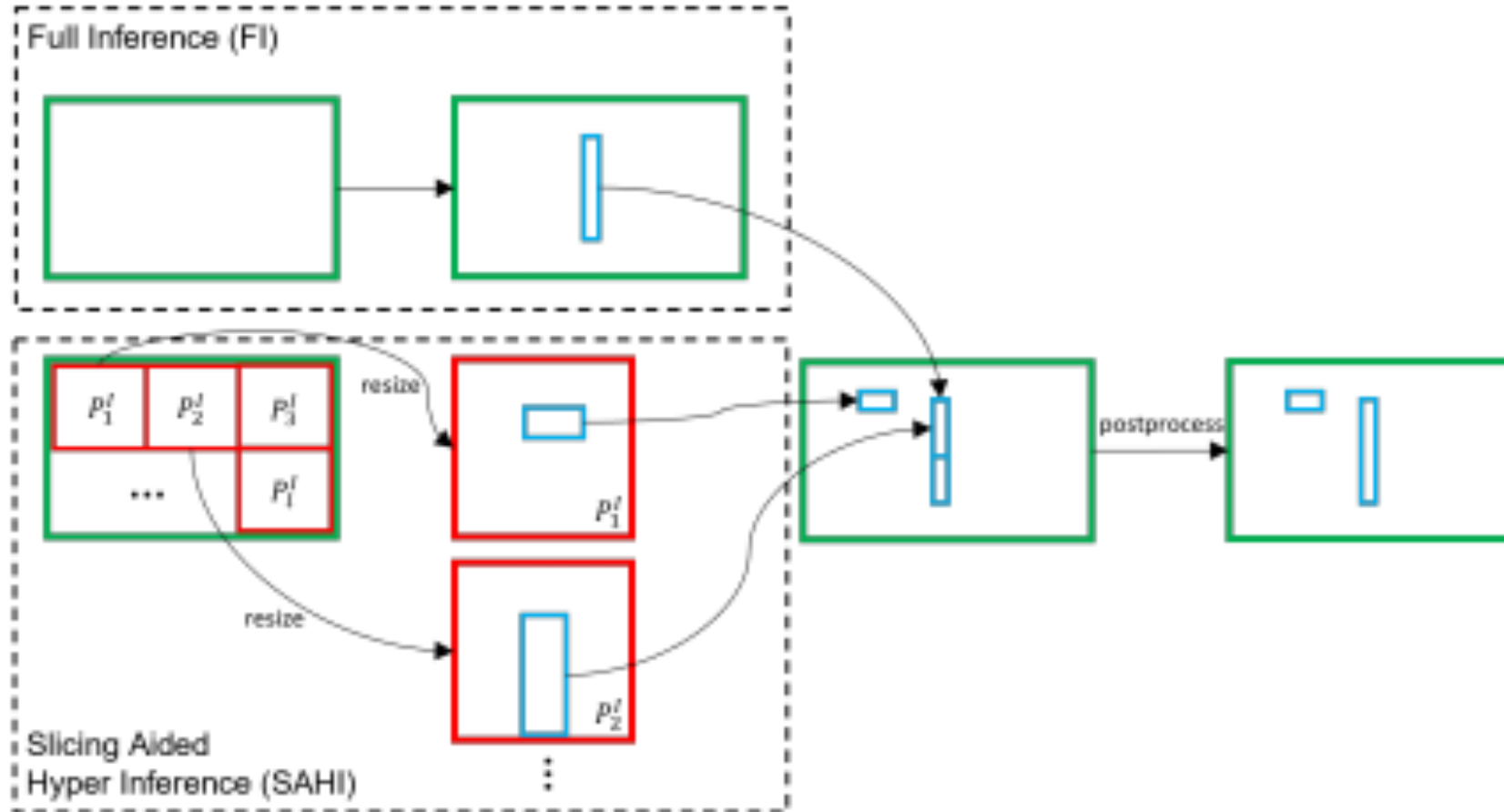
Difficult to detect small objects

And also because of data bias



People tend to train on larger object dataset.

So, we need SAHI – Slicing Aided Hyper Inference





Handson