



# YOLOv7

## Introduction

# Overview

- **What is YOLO**
- **What is Object Detection**
- **Versions of YOLO**
- **Significance of YOLOv7**

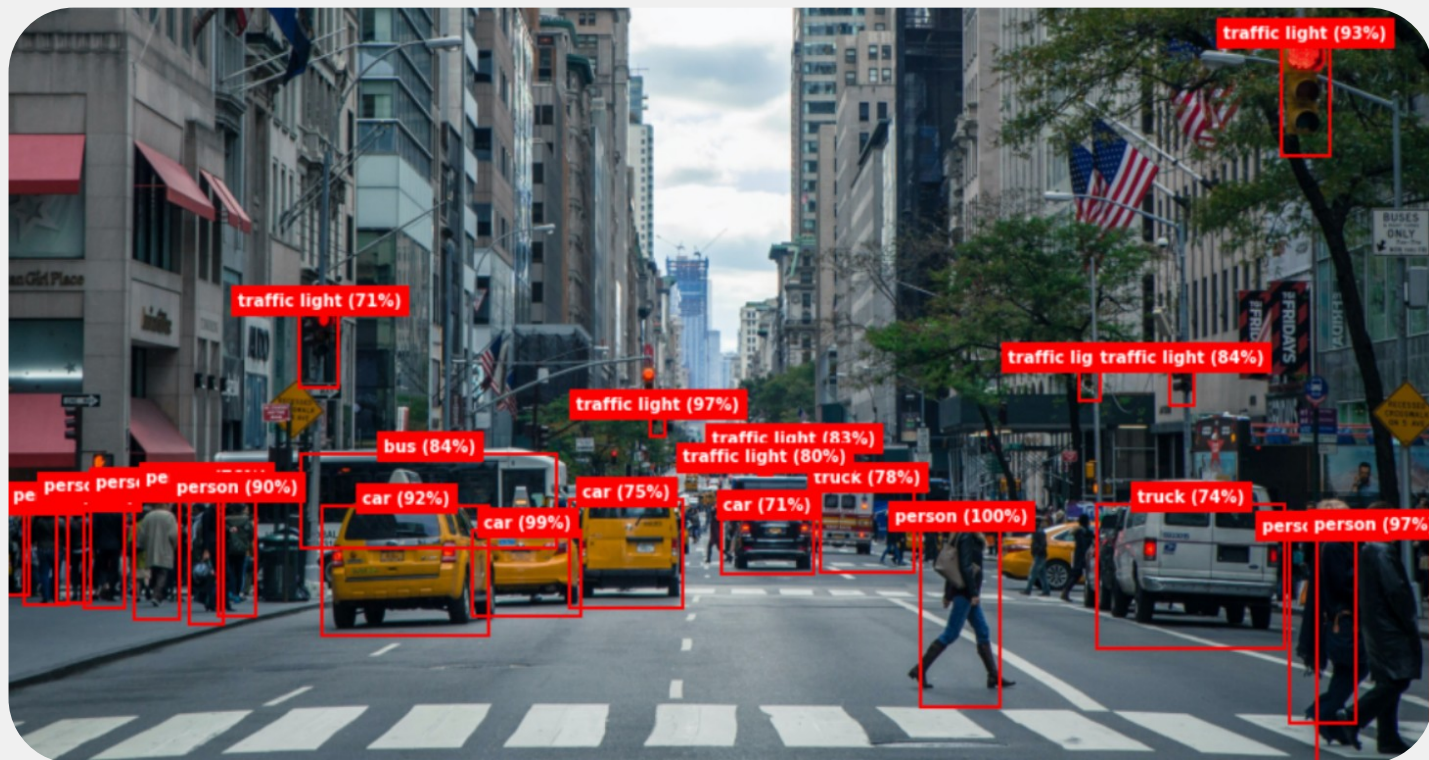


# What is YOLO?

YOLO : an algorithm that uses neural networks to provide real-time object detection

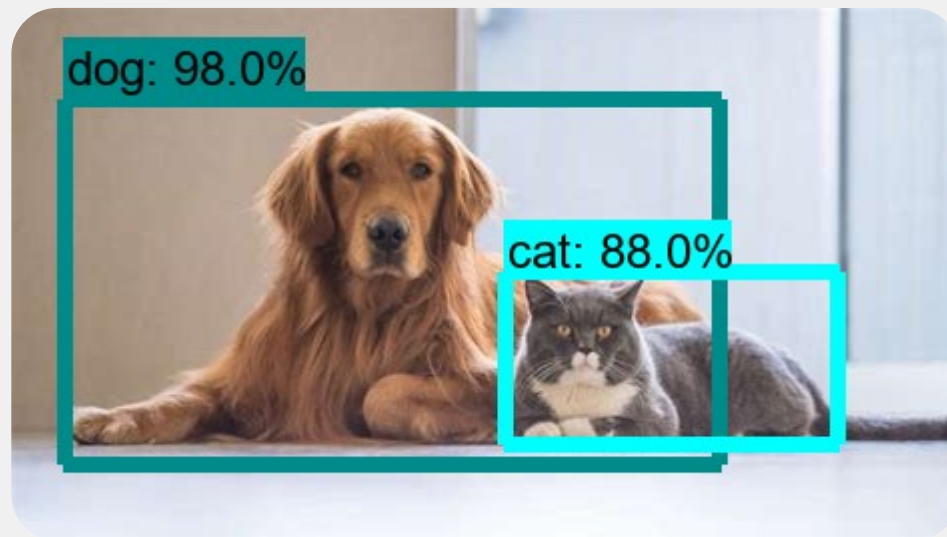
- **High Speed and Accuracy**
- **Only forward propagation**
- **Object Detection - Single Stage Detector**

# Object Detection

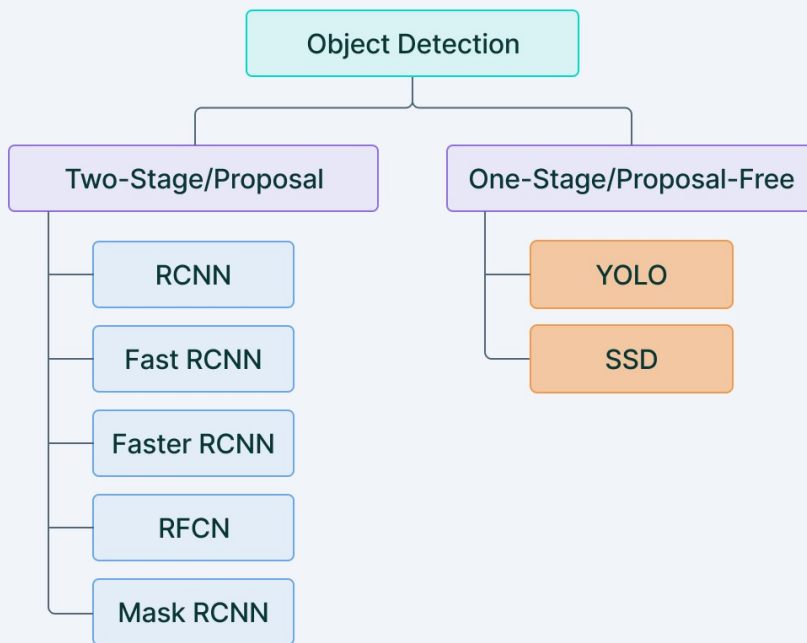


# Object Detection

**Definition : Detection of various objects in digital images and videos**



# Object Detection



## Types of Object Detection

**Two Stage - detection and recognition are two different process**

**One Stage - detection and recognition happen together**

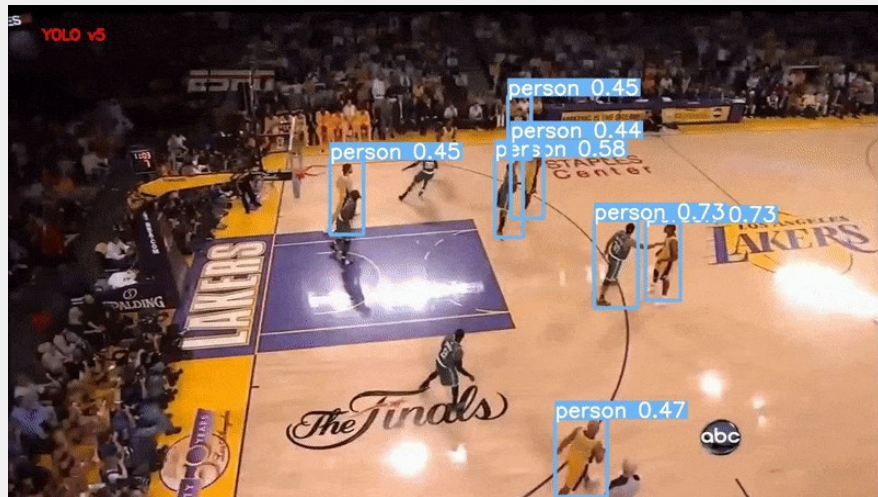
# Versions of YOLO

- YOLOv1
- YOLOv2
- YOLOv3
- YOLOv4
- YOLOv5
- YOLOv6
- YOLOv7
- YOLOR





# Significance of YOLOv7

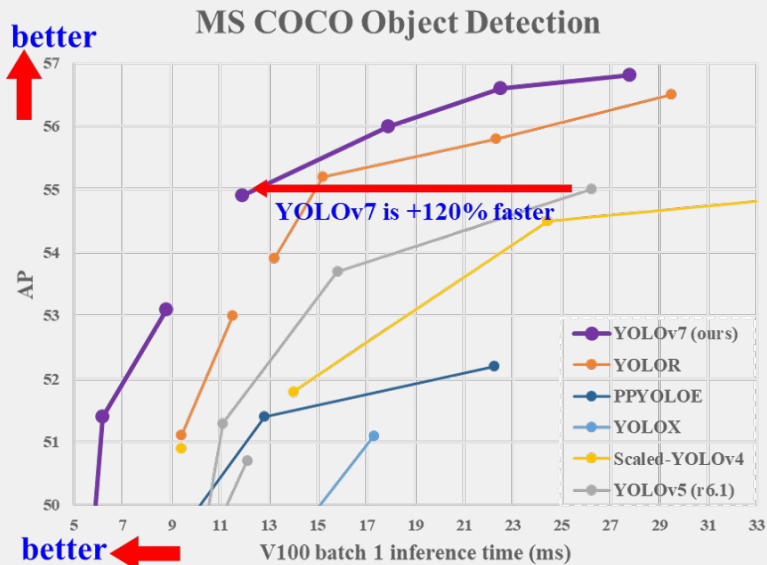


**YOLOv7** surpasses  
all known object  
detectors in both  
**speed** and **accuracy**  
in the range from **5**  
**FPS** to **160 FPS**





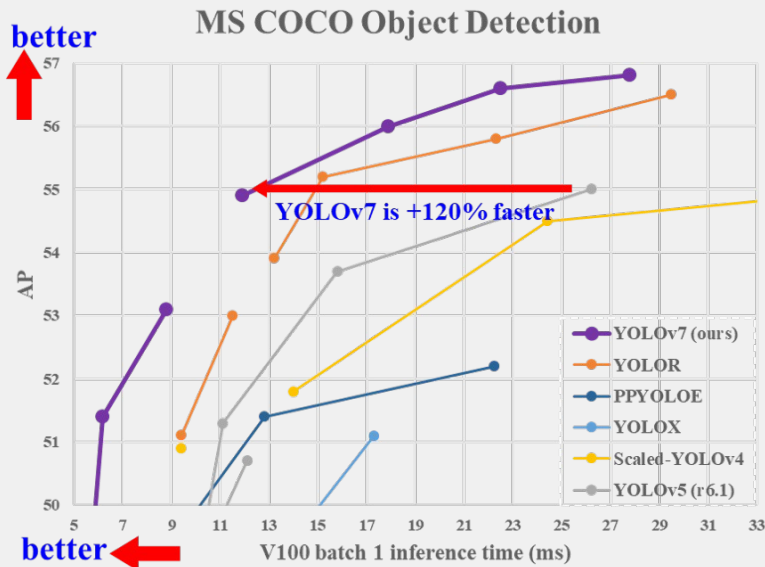
# Significance of YOLOv7



YOLOv7 outperforms these many object detectors in accuracy being **56.8% AP**



# Significance of YOLOv7



- 75% fewer parameters than YOLOv4.
- 36% lesser computational time.
- 1.5x times higher AP than YOLOv4

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# Thank You