## **Faster R-CNN**

• Faster R-CNN을 이용해서 Person Detection을 수행해봅시다.

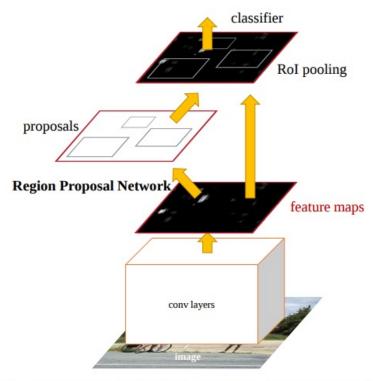


Figure 2: Faster R-CNN is a single, unified network for object detection. The RPN module serves as the 'attention' of this unified network.

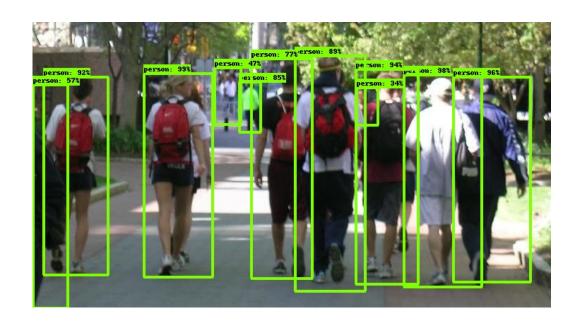
## Object Detection Model ZOO에서 제공하는 Pre-Trained Faster R-CNN 리스트

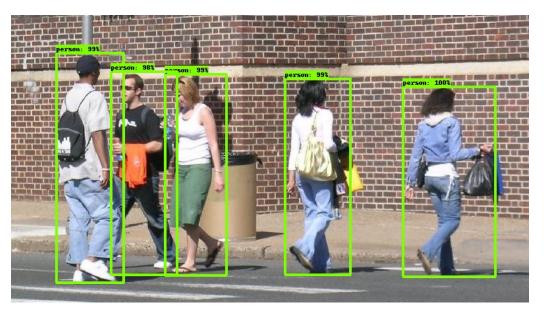
- https://github.com/tensorflow/models/blob/master/research/object\_detection/g3doc/tf2\_det ection\_zoo.md
- Pre-Trained 데이터셋: MS-COCO 2017 Dataset

Faster R-CNN ResNet50 V1 640x640	53	29.3	Boxes
Faster R-CNN ResNet50 V1 1024x1024	65	31.0	Boxes
Faster R-CNN ResNet50 V1 800x1333	65	31.6	Boxes
Faster R-CNN ResNet101 V1 640x640	55	31.8	Boxes
Faster R-CNN ResNet101 V1 1024x1024	72	37.1	Boxes
Faster R-CNN ResNet101 V1 800x1333	77	36.6	Boxes
Faster R-CNN ResNet152 V1 640x640	64	32.4	Boxes
Faster R-CNN ResNet152 V1 1024x1024	85	37.6	Boxes
Faster R-CNN ResNet152 V1 800x1333	101	37.4	Boxes
Faster R-CNN Inception ResNet V2 640x640	206	37.7	Boxes
Faster R-CNN Inception ResNet V2 1024x1024	236	38.7	Boxes

## Pre-Trained Faster R-CNN을 이용한 Person Detection 구현

- Colab 링크: https://colab.research.google.com/drive/1ClbzcgLhZAzBvYcK4AwiyGKSa3RZPxw7?usp=sharing
- 사용한 Pre-Trained 모델: Faster R-CNN ResNet152 V1 1024x1024
- 검출 대상: person





## Thank you!