

Task 2 - Week 2: GANFORGE

June 8, 2025

Overview

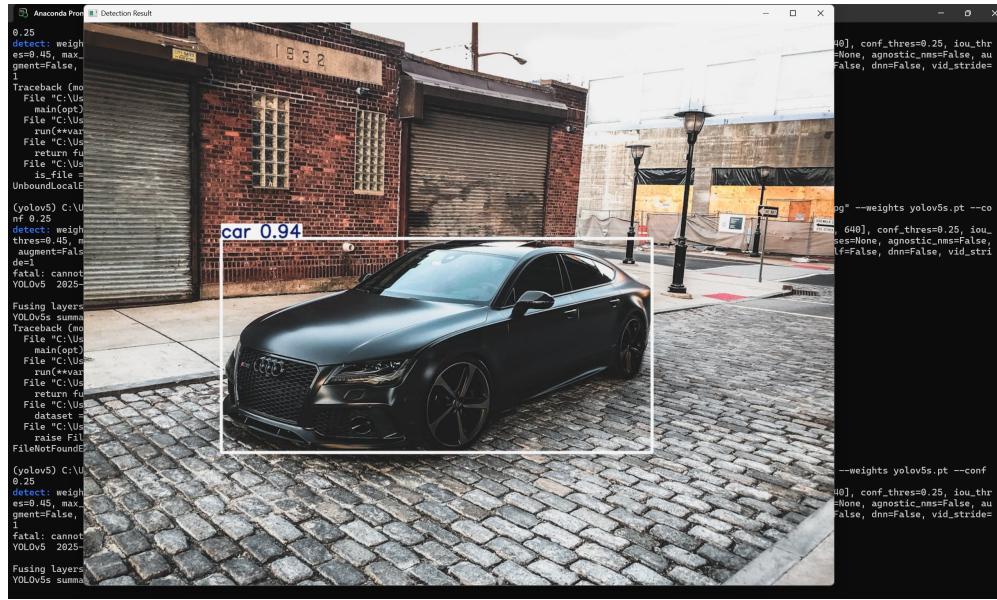
While doing this task I had to install Anaconda3 and setup its environment and then download multiple python packages. I also implemented the live webcam object detection, it was fun to see how it used to detect, though multiple times it wasn't correct.

Screenshots

Image used for object detection using YOLO



YOLO output screen identifying car with 94% probability



Terminal output producing YOLO results

```
1  Anaconda Prompt      x | + 
1 Traceback (most recent call last):
File "C:\Users\Akshat Agarwal\Downloads\yolov5\detect.py", line 464, in <module>
    main()
File "C:\Users\Akshat Agarwal\Downloads\yolov5\detect.py", line 459, in main
    run(**vars(opt))
File "C:\Users\Akshat Agarwal\anaconda3\envs\yolov5\lib\site-packages\torchutils\_contextlib.py", line 116, in decorate_context
    return func(*args, **kwargs)
File "C:\Users\Akshat Agarwal\Downloads\yolov5\detect.py", line 153, in run
    is_file = Path(source).suffix[1:] in (IMG_FORMATS + VID_FORMATS)
UnboundLocalError: local variable 'Path' referenced before assignment

(yolov5) C:\Users\Akshat Agarwal\Downloads\yolov5>python detect.py --source "C:\Users\Akshat Agarwal\Downloads\pixels-alex-amorales-321095-909907(1).jpg" --weights yolov5s.pt --conf 0.25
detect: weights=['yolov5s.pt'], source='C:\Users\Akshat Agarwal\Downloads\pixels-alex-amorales-321095-909907(1).jpg', data=data\coco128.yaml, imgsz=[640, 640], conf.thres=0.25, iou.thres=0.45, max_det=1000, device='', view_img=False, save_txt=False, save_format=0, save_csv=False, save_conf=False, save_crop=False, nosave=False, classes=None, agnostic_nms=False, augment=False, visualize=False, update=False, project=runs\detect, name=exp, exist_ok=False, line_thickness=3, hide_labels=False, hide_conf=False, half=False, dnn=False, vid_stride=1
fatal: cannot change to 'C:\Users\Akshat': No such file or directory
YOLov5 2025-6 Python-3.9.21 torch-2.7.1+cpu CPU

Fusing layers...
YOLov5s summary: 213 layers, 7225885 parameters, 0 gradients, 16.4 GFLOPs
Traceback (most recent call last):
File "C:\Users\Akshat Agarwal\Downloads\yolov5\detect.py", line 445, in <module>
    main()
File "C:\Users\Akshat Agarwal\Downloads\yolov5\detect.py", line 440, in main
    run(**vars(opt))
File "C:\Users\Akshat Agarwal\anaconda3\envs\yolov5\lib\site-packages\torchutils\_contextlib.py", line 116, in decorate_context
    return func(*args, **kwargs)
File "C:\Users\Akshat Agarwal\Downloads\yolov5\detect.py", line 179, in run
    dataset = LoadImages(source, img_size=imgsz, stride=stride, auto=True, vid_stride=vid_stride)
File "C:\Users\Akshat Agarwal\Downloads\yolov5\utils\dataloaders.py", line 339, in __init__
    raise FileNotFoundError(f'{p} does not exist')
FileNotFoundError: C:\Users\Akshat Agarwal\Downloads\pixels-alex-amorales-321095-909907(1).jpg does not exist

(yolov5) C:\Users\Akshat Agarwal\Downloads\yolov5>python detect.py --source "C:\Users\Akshat Agarwal\Downloads\pixels-alex-amorales-321095-909907.jpg" --weights yolov5s.pt --conf 0.25
detect: weights=['yolov5s.pt'], source='C:\Users\Akshat Agarwal\Downloads\pixels-alex-amorales-321095-909907.jpg', data=data\coco128.yaml, imgsz=[640, 640], conf.thres=0.25, iou.thres=0.45, max_det=1000, device='', view_img=False, save_txt=False, save_format=0, save_csv=False, save_conf=False, save_crop=False, nosave=False, classes=None, agnostic_nms=False, augment=False, visualize=False, update=False, project=runs\detect, name=exp, exist_ok=False, line_thickness=3, hide_labels=False, hide_conf=False, half=False, dnn=False, vid_stride=1
fatal: cannot change to 'C:\Users\Akshat': No such file or directory
YOLov5 2025-6 Python-3.9.21 torch-2.7.1+cpu CPU

Fusing layers...
YOLov5s summary: 213 layers, 7225885 parameters, 0 gradients, 16.4 GFLOPs
image 1/1 C:\Users\Akshat Agarwal\Downloads\pixels-alex-amorales-321095-909907.jpg: 480x640 1 car, 463.6ms
Speed: 4.6ms pre-process, 463.6ms inference, 4.0ms NMS per image at shape (1, 3, 640, 640)
Results saved to runs\detect\exp0

(yolov5) C:\Users\Akshat Agarwal\Downloads\yolov5>
```