Cover sheet

Faculty of computer and Artificial Intelligence

Course Name :- cs396\_Selected 2

Topic :- Object Detection

Team number :- 6

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| --- | --- | --- |
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Dataset:- fruit images for object Detection .

<https://www.kaggle.com/datasets/mbkinaci/fruit-images-for-object-detection/code>

Paper details:-

1)Authors name :-

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2)Year of Publication:-

\*23 /4 /2020

3)Paper Name :- Yolo V4 : optimal speed and accuracy of object detection

<https://www.kaggle.com/datasets/mbkinaci/fruit-images-for-object-detection/code>

4)Dataset used :-

MS Coco Dataset

Chart, line chart

Description automatically generated

Its results :-

Comparison of the results obtained with other stateof-the-art object detectors are shown in Figure 8. Our YOLOv4 are located on the Pareto optimality curve and are superior to the fastest and most accurate detectors in terms of both speed and accuracy. Since different methods use GPUs of different architectures for inference time verification, we operate YOLOv4 on commonly adopted GPUs of Maxwell, Pascal, and Volta architectures, and compare them with other state-of-the-art methods. Table 8 lists the frame rate comparison results of using Maxwell GPU, and it can be GTX Titan X (Maxwell) or Tesla M40 GPU. Table 9 lists the frame rate comparison results of using Pascal GPU, and it can be Titan X (Pascal), Titan Xp, GTX 1080 Ti, or Tesla P100 GPU. As for Table 10, it lists the frame rate comparison results of using Volta GPU, and it can be Titan Volta or Tesla V100 GPU.

Graphical user interface, table

Description automatically generated

Graphical user interface, application, table

Description automatically generated

Project Description

a. General Information on the selected dataset:-

1) Dataset:- fruit images for object Detection .

Link Dataset:- 2)

<https://www.kaggle.com/datasets/mbkinaci/fruit-images-for-object-detection/code>

3)the total number of samples in the dataset:-

300photos:-

4) the dimension of images:

Rgp = 3

B . implementation details:-

1) Specify any hyperparameters used in your model:

'subdivisions=24 ''batch=64'

'width=416' height=416

'momentum=0.949'

decay=0.0005

saturation = 1.5

learning\_rate=0.001'

burn\_in=1000

max\_batches = 6000

2) A block diagram of your implemented model to show the main steps, and specify in each block the used algorithm(s).

Diagram

Description automatically generatedGraphical user interface

Description automatically generated with low confidence

Diagram

Description automatically generated

C . Results details: Specify the measures that are used in evaluation and show all these results for your model on testing data

Graphical user interface

Description automatically generatedGraphical user interface, text, website

Description automatically generatedGraphical user interface, text

Description automatically generatedAn orange with a green stem

Description automatically generated with medium confidence