

Junior Computer Vision Developer

Programming Exercise

Panduka Wijesundara

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Overview

This Programming Exercise is based on Real-time Detection of Personal-Protective-Equipment.

The main task is to test the pre-trained YOLO model and give insights upon the relevant results. Here you will find the relevant documents such as Instructions to run the script, Standard metrics of the results, Timesheet to the exercise

References

1. Instruction to run the script and source

Instruction Sheet : [☰ Instruction Sheet](#)

Github (this exercise) : <https://github.com/PandukaWije/pictor-ppe.git>

Github (Original repo) : <https://github.com/ciber-lab/pictor-ppe.git>

2. Results

Standard metrics : [+ Standard metrics](#)

3. Weekly timesheet

Weekly timesheet : [+ Weekly Timesheet](#)

Conclusions

1. The model is mostly failing when classifying "person" objects as "person-hat" where the person wears a normal hat instead of an accrual safety hat .
2. There are some cases that the model detecting "person-vest" instead of a "person" if the person wears a same color clothes as the safety vests
3. In some cases model is falling to recognize the object if the majority of object is covered by another
4. Another common case is that model fails to recognize the object if the contrast between the object and the background are low , infact in that case the output is null
5. If the image contains the vest or hat even without the person wearing them the model tends to recognize them as "person-hat", "person-vest".