



Real time detect
motorcycle rider
non-wearing
helmets on the road.

Presented by

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1

Introduction



Introduction



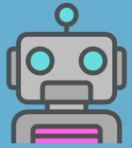
- Motorcycle riders
- Helmet detection
- Real-time detection
- Maintain safety and reduce road accidents

2

Objective



Objective



To apply artificial intelligence and analyze it in Detecting drivers who are not wearing a helmet



To increase efficiency in detecting helmets.



To study about object detection



To maintain safety and reduce road accidents

3

Method of
operation



Method of operation



1

Select the original image to be used for detection.



Method of operation



2

Creating a data set for operations



Method of operation





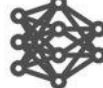


3

Select a model from the YOLOv5 architecture.

2. Select a Model

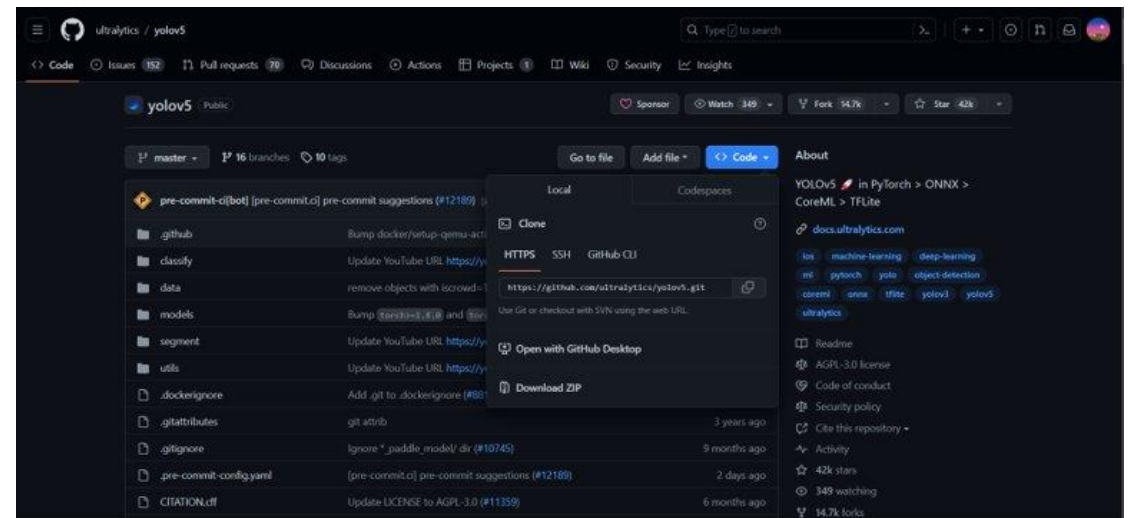
Select a pretrained model to start training from. Here we select YOLOv5s, the second-smallest and fastest model available. See our [README table](#) for a full comparison of all models.

				
Nano YOLOv5n	Small YOLOv5s	Medium YOLOv5m	Large YOLOv5l	XLarge YOLOv5x
4 MB _{FP16} 6.3 ms _{V100} 28.4 mAP _{COCO}	14 MB _{FP16} 6.4 ms _{V100} 37.2 mAP _{COCO}	41 MB _{FP16} 8.2 ms _{V100} 45.2 mAP _{COCO}	89 MB _{FP16} 10.1 ms _{V100} 48.8 mAP _{COCO}	166 MB _{FP16} 12.1 ms _{V100} 50.7 mAP _{COCO}

Method of operation



4 Clone the model from Github



Method of operation



5

Create yml file in folder yolov5

File Name	Size	Type	Created
gitattributes	23/9/2026 17:26	Git Attributes Sour...	1 KB
gitignore	23/9/2026 17:26	Git Ignore Source ...	3 KB
_pre-commit-config	23/9/2026 17:26	Yaml Source File	2 KB
benchmarks	23/9/2026 17:26	Python Source File	8 KB
CITATION.cff	23/9/2026 17:26	urla CFF	1 KB
CONTRIBUTING	23/9/2026 17:26	Markdown Source ...	5 KB
dataset	1/10/2026 19:27	Yaml Source File	1 KB
detect	23/9/2026 17:26	Python Source File	16 KB
export	23/9/2026 17:26	Python Source File	42 KB
hubconf	23/9/2026 17:26	Python Source File	8 KB
LICENSE	23/9/2026 17:26	urla	35 KB
README	23/9/2026 17:26	Markdown Source ...	42 KB
README.zh-CN	23/9/2026 17:26	Markdown Source ...	41 KB
requirements	23/9/2026 17:26	unrarmlbarma	2 KB
setup	23/9/2026 17:26	Configuration Sou...	2 KB
train	23/9/2026 17:26	Python Source File	34 KB
tutorial	23/9/2026 17:26	Aspyler Source File	41 KB
val	23/9/2026 17:26	Python Source File	21 KB
yolov5.pt	23/9/2026 22:35	urla PT	14,662 KB

Method of operation



6

Trend model



TRAIN YOLO-V5 ON CUSTOM DATASET

KARNDEEP SINGH

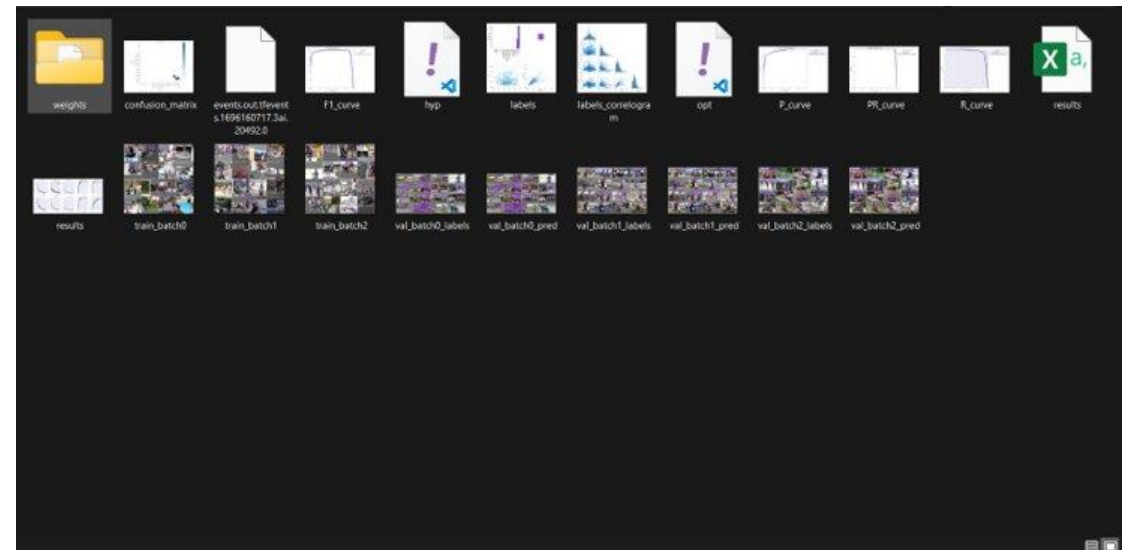


Method of operation



7

files obtained from training to
continue



Method of operation



8

Trend Detect data from models that have been learned



4

Research
results





Research results

1

Separation
between helmet
wearers and non-
helmet wearers.

2

Accuracy of
inspection

3

Object detection
errors

4

Adding more
datasets and
training models