Team Id: PNT2022TMID24428

Project Objective

YOLO

· YOLO-based Convolutional Neural Network family of models for object detection**.**

· YOLO is an abbreviation for the term ‘You Only Look Once’. This is an algorithm that detects and recognizes various objects in a picture (in real time). Object detection in YOLO is done as a regression problem and provides the class probabilities of the detected images.

· The most recent variation called YOLOv3.

· This algorithm is popular because of its speed and accuracy. It has been used in various applications to detect traffic signals, people, parking meters, and animals.

To train a YOLO model in windows environment:

· Image Collection

· Image Selection (How to choose a proper set of images to train YOLO) · Annotate Image

· Download and configure Darknet in Windows

· Create Train and Test Data to train YOLO model

· Compile darknet on Windows
· Train YOLO custom object detection model in Windows
· Test YOLO model for image and video