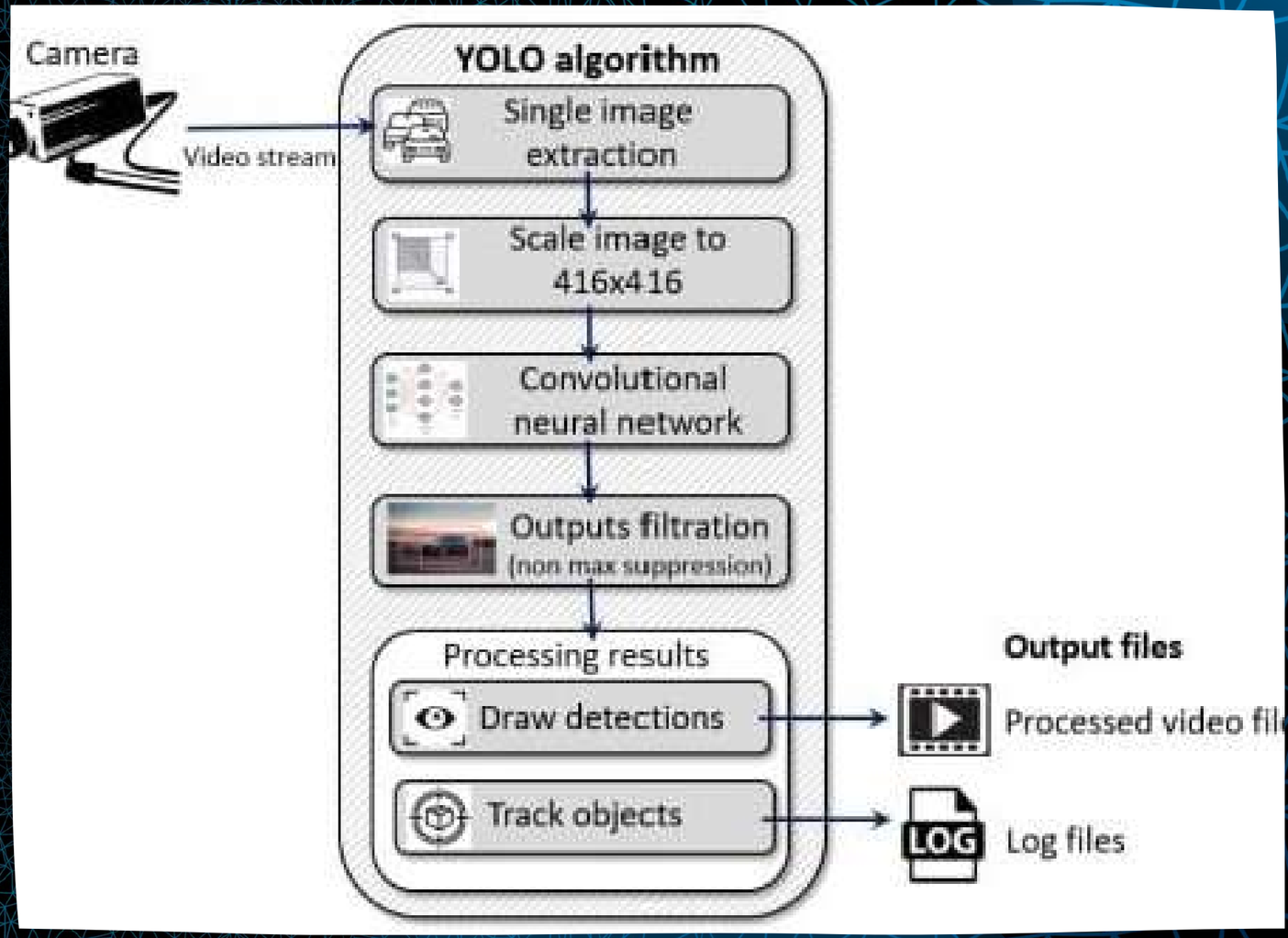
MINI PROJECT ON :

OBJECT DETECTION USING YOLO

AIM OF PROJECT :

To detect objects from camera and create system that can find or identify objects from images or videos

ALGORITHM :


Camera
Video stream
YOLO algorithm
Single image extraction
Scale image to 416x416
Convolutional neural network
Outputs filtration
(non max suppression)
Processing results
Draw detections
Track objects
Output files
Processed video file
LOG
Log files

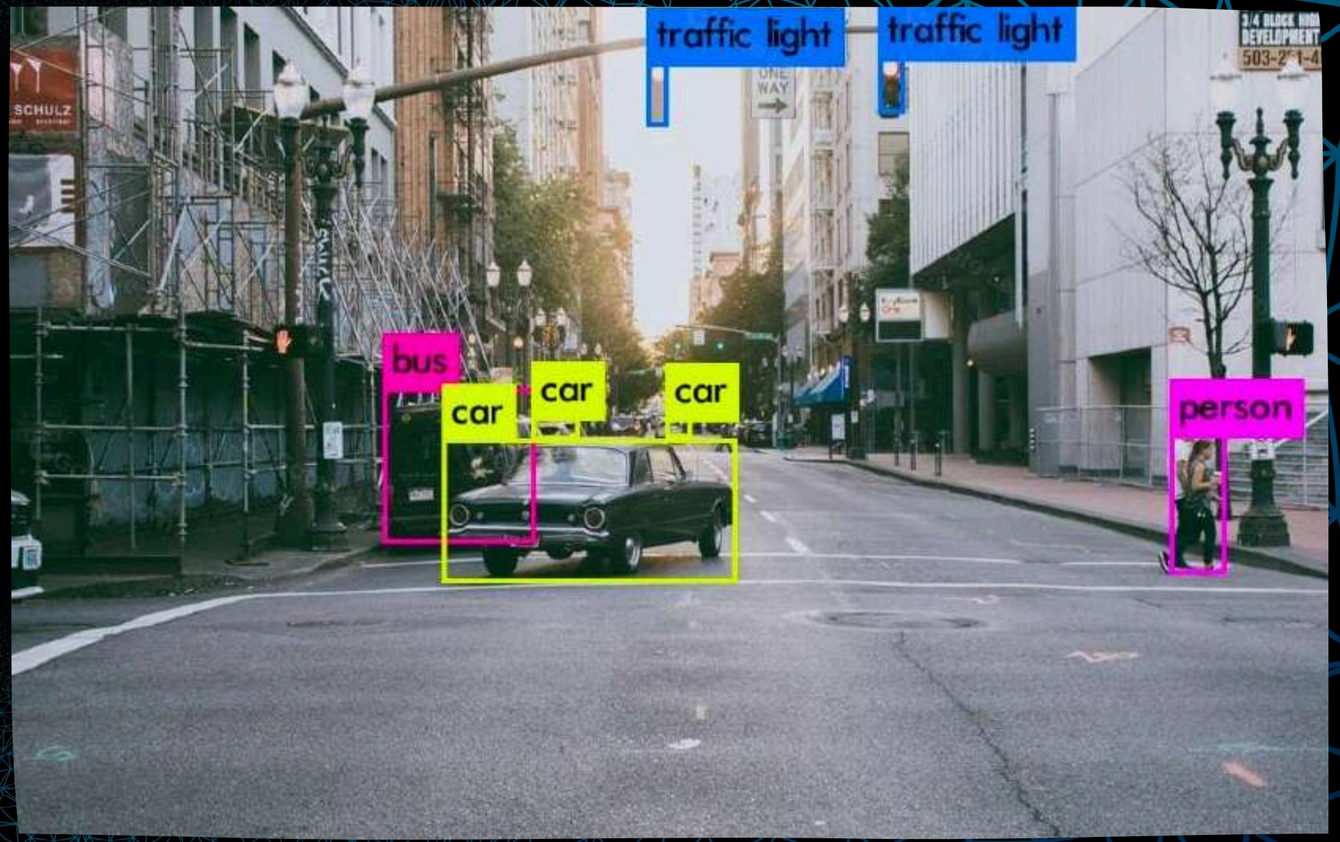
METHODOLOGY:

1. The project uses the YOLO algorithm, specifically the YOLOv5 version for object detection.

2. The camera access is provided using the OpenCV machine learning and deep learning library.

3. YOLOv5 is a fast and accurate deep learning model used to detect and classify objects in real time.

SAMPLE OUTPUT :



FUTURE SCOPE :

In the future, even very small objects can be detected using advanced models. A better model can be created to improve traffic control and CCTV surveillance, making them more accurate and efficient.

THANK YOU