

	S.No	Title	Description
Module 1 - Object Detection	Video 1	Course Overview	Details about the course, Parts, Topics sequence etc
	Video 2	Object Detection Basics	Object Detection meaning breif about some detection techniques
	Video 3	YOLO - Basics	Details on Basic intuition of YOLO
	Video 4	YOLOX - Reaseach Paper	Reading the Research Paper and Explaining it
	Video 5	Loss Function for Yolo X	Explaining the Loss Function
	Video 6	Evaluation Metrics	Explaing Different Evaluation metrics for Object Detection
	Video 7	Intersection Over Union	Explaing IOU and implementing in Pytorch
	Video 8	Non Max Supression	Explaining NMS and implementing in Pytorch
	Video 9	Mean Average Precision	Explaining mAP and implementing in Pytorch
	Video 10	Colab Demo - Video/image	Will Demo YoloX Object Detection on Video Image on different models with FPS
	Video 11	Colab Demo - Live Inference	Colab Demo
Module 2 - Model Training	Video 1	How to Create Custom Dataset	Using Webcam Prepare data for Emotion Detection, Take pictures of Different Emotions
	Video 2	Annotating our Dataset	Annotate the Webcam taken pictures using Roboflow
	Video 3	Configuring for Custom dataset and Training with Roboflow	Configure YoloX for Custom Dataset
	Video 4	Training and Training Parameters	How to tune training parameters and resume training on Colab
	Video 5	Inference of Custom Model	How to Inere on Live web-cam showing YOLOX detection
Module 3.1 - Object Tracking	Video 1	Object Tracking Basics And SOTA	What is Object Tracking, Why, how, types and SOTA, same video is already present at your channel
	Video 2	SOTA Tracking Algo (will reseach for the latest one)	Basics, concept how better than DeepSORT
	Video 3	Research Paper	Paper Review
	Video 4	Implementing The Basic Architecture	Implementing on Colab with pre trained and little demo

Module 3.2- Tracking + Algorithms	Video 1	Detect and Track Vehicles	Using the above models Detect and track vehicles
	Video 2	Count and Sort Vehicles	Assign unique ID to each Vehicles
	Video 3	Detect Directions	Detect Directions of the Vehicles
	Video 4	Detect Speed	Speed Detections
Module 4 - Dashboard	Video 1	Plotly Dash basics	How to setup a very basic dash app
	Video 2	How to get your dashboard live on Colab	Will explain , NGROK and CLOUDFLARE
	Video 3	Learning Dash - HTML Elements	Will Explain Basic HTML Elements on Dash - There is a page of Dash having all HTML elements will choose few of them and can Explain the important ones
	Video 4	Learning Dash - Dash Core Components	Similarly there is a page for Dash core components having buttons sliders ,cards etc
	Video 5	Learning Dash - Visualizations - Graphs	Can explain some Graphical visualizations
	Video 6	Learning Dash - Visualizations - Pie Charts and Suburst Charts	Can explain Pie charts and sun bursts
	Video 7	Learning Dash - Bootstraping Dash	There is a boot strap Component page which has various components which beautifies everything
	Video 8	Learning Dash - Layout Design and Styling	How to approach a layout by Table Row Column design
	Video 9	Putting all together to make a Dashboard	Putting all together and design the dashboards
	Video 10	Enhancing Dashboard - OfCanvas / Menu / Logos / Metas	Trying varios themes, Fonts , styles , Off Canvas page menu section etc
	Video 11	Finalizing Everything & Conclusion	Project Ideas using the above
	Video 12	Way Forward from Here	How to approach from here , Future research Papers & more techniques
	Video 13	Project Assignment	Project Assignment of Creating a similar Project - Detect People in a Shopping Centre, Identify Direction and speed of their Walking , Bonus Generate Heat Maps