DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

# PROJECTPROPOSAL

## Project Title: -

## Traffic Automobile Counter

## Project Scope: -

The objective of this project is to develop an traffic automobile counter model that can accurately detect and count vehicles in a given video footage or image data. The data will be collected from various sources, including CCTV cameras, drones, and other imaging devices. The data will be in the form of video footage or image data. The collected data will be pre-processed by removing noise, cropping and resizing images, and converting to a suitable format for the model. The pre-processing steps will also include annotating the images or video frames with labels to indicate the position and type of each vehicle. The performance of the model will be evaluated based on metrics such as accuracy, precision, and recall. The development process of the model will be documented in detail, including the model architecture, training methodology, testing methodology, and deployment procedures. The documentation will be provided to stakeholders for future reference. Overall, this project scope is designed to create an accurate and efficient traffic automobile counter model that can be used for traffic analysis and planning.

## 3. Requirements: -

* Hardware Requirements

1. Camera
2. Computer
3. GPU
4. Storage
5. Power Supply

* Software Requirements

1. Computer Vision Framework
2. Object Detection Model
3. User Interface
4. Programming Languages
5. Operating System
6. Machine Learning Framework

**STUDENTS DETAILS**

|  |  |  |
| --- | --- | --- |
| **Name** | **UID** | **Signature** |
| Mudit Sharma | 20BCS6542 |  |
| Pooja Jain | 20BCS6551 |  |

**APPROVAL AND AUTHORITY TO PROCEED**

We approve the project as described above, and authorize the team to proceed.

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| **Name** | **Title** | **Signature**  **(With Date)** |
| Ms. Shiwani Sharma |  |  |