**COEP Technological University (COEP TECH)**

**Department of Computer Engineering & IT**

**AY 2022-23**

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| **I.** | **Project Title** | **“Efficient Traffic Surveillance Using OCR Algorithms and YOLOv7”** |
| **II.** | **Abstract** | We are creating a system that uses a combination of computer vision and Deep Learning techniques to detect and track vehicles in real time, estimate their speed, and recognize their license plate numbers. The system will consist of CCTV captured video, detecting Vehicles using YOLOv6; Number Plate using OCR viz a viz license number; Speed using tracking Motion Estimation Algorithms such as Optical Flow. With the help of the latest technologies like YOLO, we aim to further enhance the existing Traffic Management Systems which use Ant R-Graph for object detection. |
| **III.** | **Keywords** | YOLOv7 (You Only Look Once); OCR (Optical character recognition); Optical Flow; MEA (Motion Estimation Algorithms) |

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|  | **MIS #** | **Student Name** |
|  | 111903033 | Ghanasham Rajaram Salunkhe |
| 111903043 | Kunal Dipak More |
| **Internal Mentor** | ***Prof P. K. Deshmukh Sir*** | **COEP** |