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DEPLOYMENT AND REPORT GATHERED IN CHENNAI

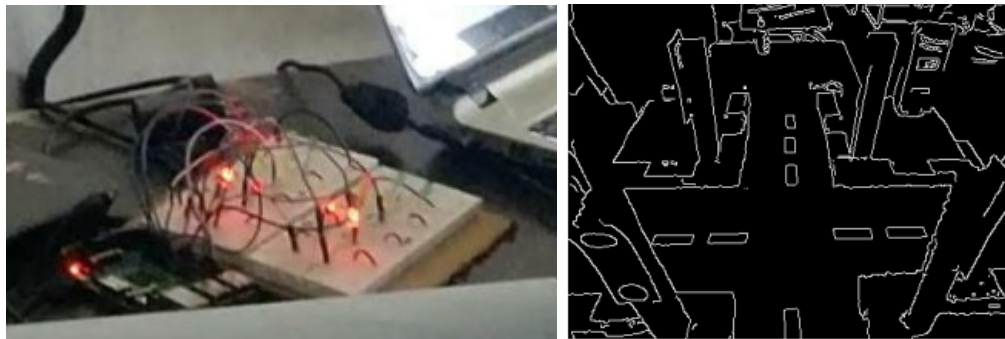
Deployment place: Chennai Central

Deployment timings: From 8:30AM to 6:30PM On 15th October 2023.

Deployment Model:

This is the basic setup for the traffic device we deployed

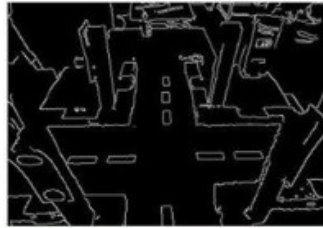
Now let's see the sample output generated in the room:



After deployment in the Chennai Road the capturing and other sense



The edge detected image for the first reference image-



The match percentages for the samples were-

76.44%

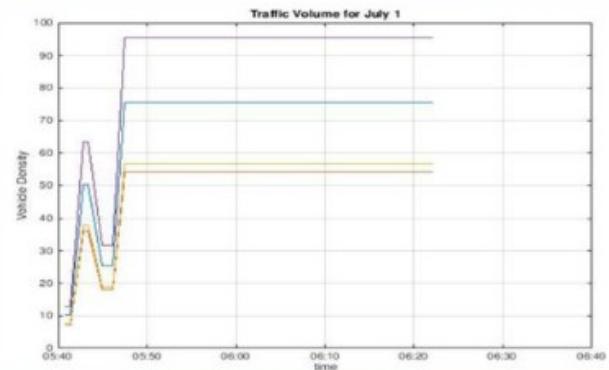
83.42%

56.54%

95.66%

According to the above matches, signal 3 was given first priority followed by 1, followed by 2 and then 4.

The following are some pictures of the system in action-



REPORT (generated on 15 October 2023):

Introduction:

Chennai, a bustling metropolis in Southern India, experiences diverse traffic patterns throughout the day. This report provides an overview of the city's traffic flow, highlighting peak hours and variations in vehicle count.

Traffic Flow Throughout the Day:

Early Morning (6:00 AM - 7:00 AM): Chennai's roads start the day with moderate traffic. Commuters gradually begin their journeys, and the streets are relatively calm compared to later hours.

Morning Rush (10:00 AM): Around 10:00 AM, Chennai experiences a significant increase in traffic. The number of vehicles on the road nearly doubles as people head to work and run errands.

Midday to Afternoon (12:00 PM - 4:00 PM): The traffic gradually decreases during this period, making it a relatively smooth time to travel. However, the city's arterial roads still have a substantial volume of vehicles.

Evening Rush (6:30 PM): Traffic efficiency increases considerably in the evening, with 6:30 PM marking the peak rush hour. Congestion is common on major roads, and the vehicle count is at its highest.

Night and Late Night (9:00 PM - 3:00 AM): Traffic continues to decrease in the late evening and late-night hours. The streets are quieter, and fewer vehicles are on the road.

Illustration of Vehicle Count:

Here is a simplified illustration of vehicle count throughout the day, represented as a relative percentage of the maximum count at the evening rush hour:

6:00 AM - 30%(Estimated)

10:00 AM - 60%

12:00 PM - 45%

6:30 PM - 100%

9:00 PM - 40%(Estimated)

3:00 AM - 20%(Estimated)

Please note that the percentages are indicative and may not represent the actual vehicle count. Accurate vehicle count data would be essential for precise analysis.

Conclusion:

Chennai's traffic patterns follow a typical urban rhythm, with morning and evening rush hours causing the most congestion. Understanding these patterns can help commuters and traffic management authorities plan their journeys and infrastructure development more effectively.

S. No.	Road Name	Traffic Lanes*	Proportion (in %)								
			Cars	Taxis	Autos	Two Wheelers	Buses	Trucks	LCVs ¹	Total FMVs ²	SMVs ³
1	L.B. Road	2	13.1	2.4	10.0	47.7	0.9	1.5	4.1	79.6	20.4
2	C.I.T. Nagar	3	15.5	1.7	10.9	52.1	5.9	1.9	3.5	91.5	8.5
3	Arcot Road	4	13.8	2.1	13.7	51.5	3.1	1.0	1.9	87.3	12.7
4	Inner Ring Road	4	15.3	3.5	10.1	47.4	3.2	4.8	4.5	88.9	11.1
5	EVR Periyar Road	4	15.4	1.6	10.5	44.4	4.0	5.0	5.7	86.7	13.3
6	Poonamallee High Road	4	16.5	1.3	14.1	53.4	2.2	2.6	2.3	92.4	7.6
7	M.T.H. Road	4	7.1	0.1	6.0	62.9	2.5	3.2	3.7	85.5	14.5
8	Paper Mills Road	2	2.9	1.0	8.6	48.5	1.5	1.5	1.5	65.6	34.4
9	Erukencheri High Road	3	3.8	1.3	15.7	40.1	4.0	7.1	2.4	74.5	25.5
10	Kodambakkam High Road	4	1.9	0.4	13.2	24.4	1.1	5.4	1.9	48.3	51.7
11	Thruvotriyur High Road	4	6.3	0.4	15.2	39.6	6.1	5.7	3.8	77.0	23.0
12	Prakasam Salai	2	2.0	0.2	14.7	36.6	1.4	1.4	1.8	58.1	41.9
13	Rajaji Salai	4	11.5	1.6	17.2	54.5	3.3	1.9	2.6	92.5	7.5
14	Kamaraj Salai	6	30.1	1.0	10.2	46.6	4.5	0.8	1.8	95.0	5.0
15	Santhome High Road	2	26.5	1.4	9.7	44.8	3.5	3.1	4.6	93.7	6.3
16	Dr. R.K. Salai	4	25.2	2.5	12.0	51.1	0.8	0.6	1.0	93.0	7.0
17	Kotturpuram Main Road	2	22.3	2.5	11.1	48.9	1.3	1.2	1.7	88.9	11.1
18	Velachery Main Road	2	9.0	1.0	6.6	62.8	3.3	4.1	3.1	89.8	10.2
19	Konnur High Road	2	7.1	2.0	13.8	48.3	4.6	3.0	2.4	81.3	18.7
20	Wall Tax Road	4	4.4	0.4	21.9	40.7	3.6	1.3	3.4	75.8	24.2
21	Anna Salai	6	20.4	4.1	12.2	42.7	6.3	3.0	3.5	92.3	7.7