

# INTELLIGENT TRAFFIC MANAGEMENT SYSTEM





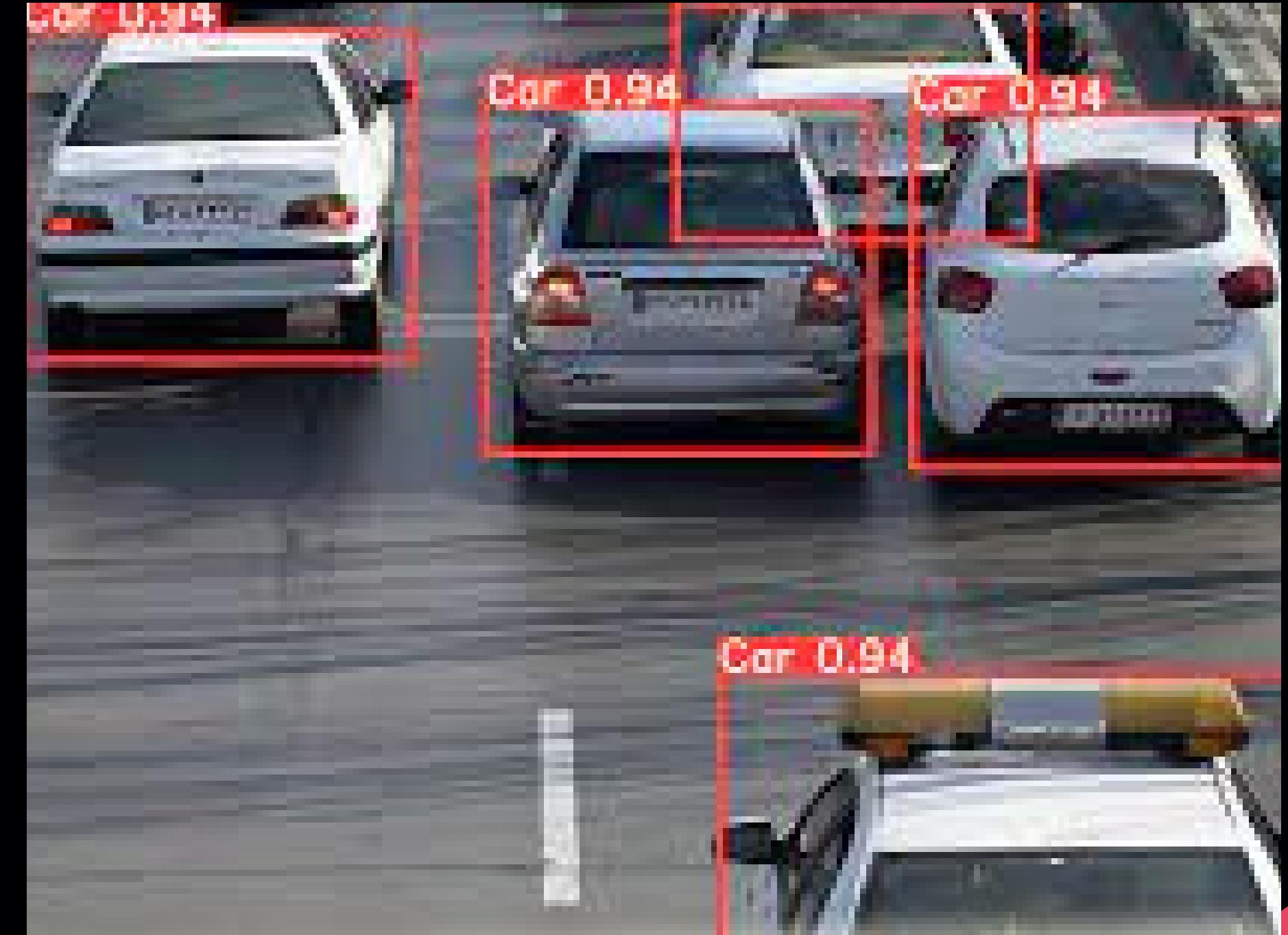
ITMS

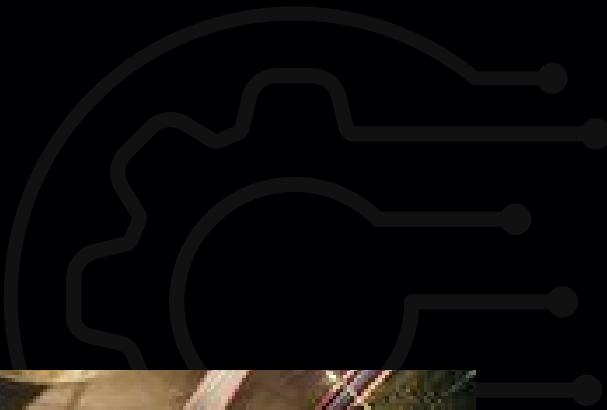
# OUR PROJECT

How often are you stuck in traffic?  
Some minutes, some hours. Isn't it  
tiring?

We, the Professional Amateurs are here  
to provide you with the solution.

Indulged in next-gen artificial  
intelligence, we have created a system  
that will help in managing the traffic  
and much more.





# TRAFFIC AND US

Traffic congestion has become one of the plagues of modern life in a metropolitan city. Time spent ensnared in traffic is simply time wasted. We present a dynamic model of traffic management based on the traffic lighting signals.



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# VISION & MISSION

## Vision

We aspire to streamline the flow of traffic and reduce the amount of congestion faced by drivers in major urban cities.

## Mission

Our mission is to make city driving feel more seamless and secure and to upgrade the pre-existing infrastructure of traffic monitoring and management.



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01

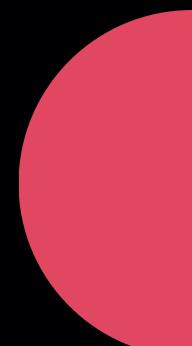
Density-Based  
Traffic Control

02

Priority Passage  
for Emergency  
Vehicles

03

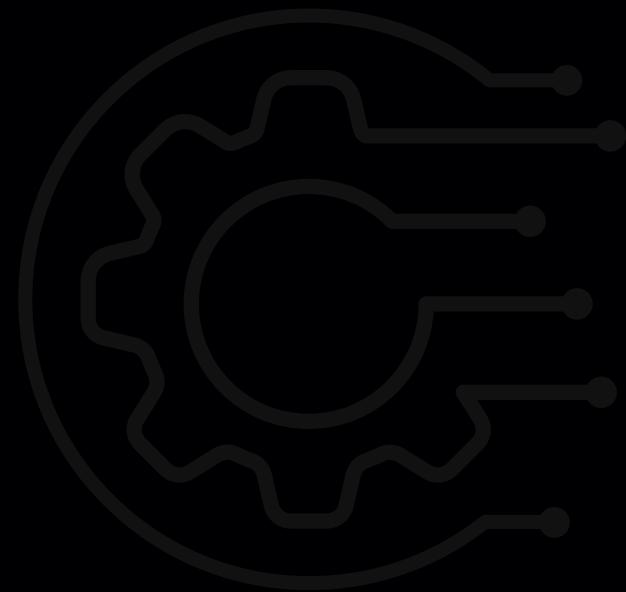
Added Layer of  
Security for  
Pedestrians



**01**

## Density-Based Traffic Control

1. Using live data collected through the existing cameras at intersections, our self-designed artificial intelligence program will detect the maximum amount of congestion.
2. After its detection, the system will automatically optimize the green light time for the complete passage of vehicles.
3. We have developed a prototype using our Arduino setup.



02

## Priority Passage for Emergency Vehicles

- The system will prioritize safe passage of Emergency vehicles (ambulances, Fire Brigades, etc.) using a unique RFID tagging system.
- Whenever the system tags an emergency vehicle approaching the intersection, it will automatically moderate the traffic lights in order to provide fast and quick travel for such vehicles.



## Added layer of security for pedestrians

- In order to avoid many road accidents, we are planning to install IR sensors parallel to the flow of traffic to detect the presence of an incoming pedestrian or an animal.
- When the presence of the subject is detected, the traffic lights are going to turn red which will stop the traffic, preventing an accident.
- This feature is also shown in the Arduino prototype.



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# BENEFITS OF ITMS

Increased security for on-foot pedestrians and animals which can save countless valuable lives

Unique modeling technique for identifying emergency vehicles like ambulances and fire trucks giving them clear space



# THANK YOU

