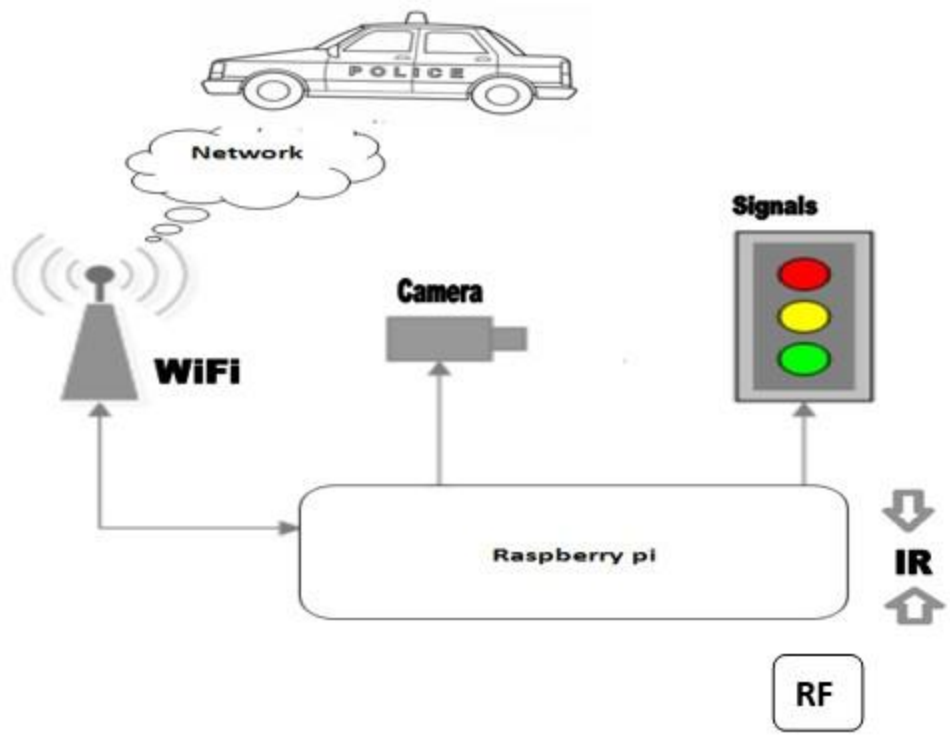
IOT BASED TRAFFIC MANAGEMENT

ABSTRACT

- In the contemporary world, urban mobility is one of the unprecedented challenges to be tackled in the administration of a big city. This paper analyses the ever growing urban population around the globe and discusses about the traffic systems in densely populated cities like Los Angeles and Amsterdam. Further, an advanced traffic management system is proposed, implemented using Internet of Things IOT. The system is supported by a circuit embedded in the vehicle, which operates using RFID with clustered systems. The functionalities of the system include efficient traffic light control, parking space identification and anti-theft security mechanism. The proposed architecture and working with big data analytics involving Hadoop is presented. Moreover, supervised learning methodologies are proposed that would help in determining the standard of roads, estimating overall traffic flow, calculating average speed of distinct vehicle types on a road and travel path of a vehicle.

WORKING PRINCIPLE

- There will 8 sensors across the 4 lanes with each lane having 2 sensors each to give the data how much dense the lane .If the entire lanes have less traffic the system will work normally means there lanes sequence will be First A lane then D lane then C lane and at last D lane.


POLICE
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PROBLEM STATEMENT

- Traffic congestion problems consist of incremental delay, vehicle operating costs such as fuel consumption, pollution emissions and stress that result from interference among vehicles in the traffic stream, particularly as traffic volumes approach a road's capacity.

TRAFFIC MANAGEMENT SOLUTION

- An Internet of Things (IOT)-enabled intelligent traffic management system can solve pertinent issues by leveraging technologies like wireless connectivity & intelligent sensors. Considered a cornerstone of a smart city, they help improve the comfort and safety of drivers, passengers & pedestrians.

CONCLUSION

- The future of IOT is bright, with many emerging trends and applications set to transform industries and improve our daily lives. From edge computing and AI to smart cities and the possibilities for IOT are virtually limitless.