

# Traffic lights system using microcontroller

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**Abstract--**Since for past year's we have been using traffic light by the microcontroller. Several stoplight in contrast to foreign countries, will be using traffic lights. The info will be offers a forecasted route to user by contacting totally different traffic lights on the method of user. The location of this analysis with efficiency and to save lot of times that which helps people to move to there place at safe manner.

**Keywords--** Microcontroller, Timer, Router, Camera.

## I INTRODUCTION

Now a day the requirement for energy is dominant. To satisfy the use to power provide, researcher's area unit functioning to totally different energy and experienced energy sources. It is needed to create the wire as be connected to the battery [1-3]. The battery to charging and maintenance that makes it tough to charge it each currently so in standard ways that at locations like busy roads and foreign places. To unravel this example, energy gathering technique victimization electricity material may be used. This system is especially supported changing mechanical stress into power by suggests that of low-frequency vibration victimization piezoelectricity. During this paper, we've got planned associate degree innovative thanks to harvest energy by piezoelectricity within the roads victimization the vibrating motion of vehicles. There are a unit many works that has been done on gathering energy from electricity [4-5].

Most street lights present deployed have supported preset the traffic lights , to raised sustain the transit by observation the road network, many various styles of time period traffic information square measure available; that permits the implementation of a trail [6-7]. It has projected a lighting management system supported variety of road parameters, a number of that square measure traffic connected.

Automation could be a want of present world. By inventing the ancient systems, can do bigger and perfect maintains of the system [8-10]. The observation system is take proximity sensor. Light is bulk light several the issues of traffic lights and pollution. Some of different type arrangement is needed for the traffic light-weight rail to limit outpouring current. The enforced between rail tracks come wires one among them. They're vulnerable to injury throughout lightning strikes [11-12]. The surge voltages on diode boxes are analyzed and technique beneath completely different conditions during this enclose have an effect on the surge voltage considerably.

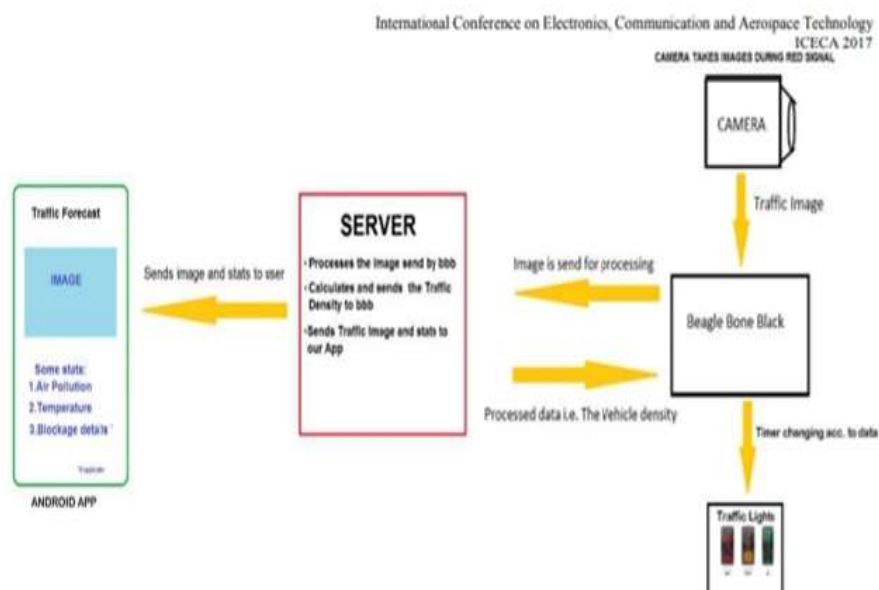
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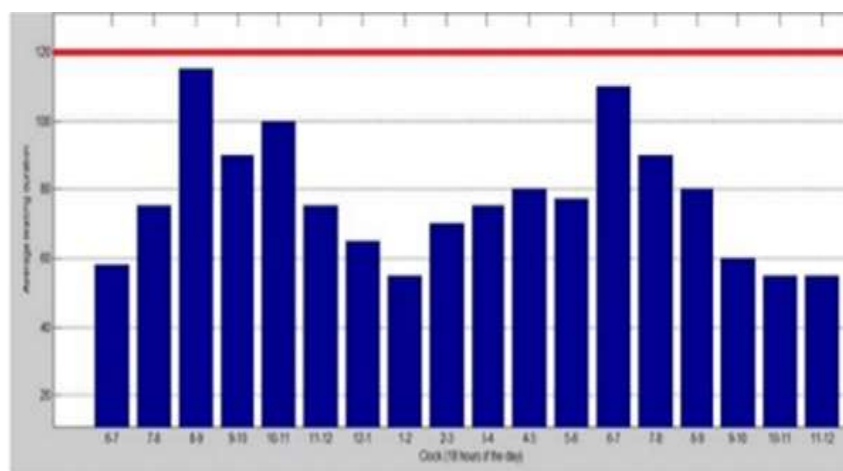
## II METHODOLOGY

There is traffic forecast that which tell about the few of states like air pollution, noise pollution and sound pollution this will be send through a server by having the proof of the traffic lights images of the traffic as shown in figure. 1. The camera that which captured images that will send that images to beagle bone black of the traffic lights that which changes according to the data. The beagle black bone will send images to server that will send that to the microcontroller (or) Mobile.



**Figure 1:** Traffic system using micro controller

Vehicle to represents a possible resolution to capability solving the network of mobile. However, there is a problem between senders and receivers who needs information of the vehicles. That is commonly to get the main time. We tend to propose to resolve the drawback by leverage that regulates the transport quality. Average waiting time of vehicles in front of traffic lights is represented in bar chart as figure. 2 and the traffic composition are shown in table. 1.



**Figure 2:** Average waiting time of vehicles in front of traffic lights

**Table 1:** composition of traffic

<b>VEHICLE TYPE</b>	<b>Percentage</b>
2-wheeler	53%
Cycle	1%
Auto	11%
Car	22%
Bus	9%
Trucks	4%

### **III SCOPE**

This will help people to that which will gather the information about vehicle in the traffic lights about the conditions for traffic lights that which help more by connecting to the mobile.

### **IV RESULTS**

So there using the microcontroller in traffic lights will help the company's that which will be working on traffic lights.

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