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TRAFFIC RULE MANAGEMENT SYSTEM USING WIRELESS SENSOR NETWORK

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ABSTRACT

From the time in memorial, Traffic Rule Management System has remained a primary concern and today the rules of the roads. The rules apply to all road users such as drivers, pedestrians, motorcyclists, horse riders, cyclists. The rules ask us to take personal responsibility for our use of the roads, and in doing so become better, safe and more socially responsible road user. It is very important to follow to traffic rules so that we can save lives and prevent injury by changing our behavior.

Now a days the world is diverting to digital technology whether its online money transaction or online filling form. So why not challan send to the vehicle users through digital technology rather than sending hardcopy from currier by scanning the number plate of that vehicle. Here we are using Wireless Sensor Network Technology which will helps us to include GPS system by which head of the traffic police can track the location of traffic police of over the city. Also In case, if any vehicle met with an accident than GPS system will help to reach to that particular location.

INDEX TERM- Wireless Sensor Network, Unauthorized Vehicles, GPS System, Vehicle Surveillance, Vehicle Identification.

INTRODUCTION

Sensors link the physical with the digital world by capturing and revealing real-world phenomena these into a form that can be processed, stored, and acted upon. Integrated into numerous devices, machines, and environments, sensors provide a tremendous societal benefit. They can help to avoid catastrophic infrastructure failures, conserve precious natural resources, increase productivity, enhance security, and enable new applications such as context-aware systems and smart technologies. The phenomenal advances technologies such as very large scale integration (VLSI), micro electromechanical systems (MEMS), and wireless communications further contribute to the widespread use of distributed sensor systems.

For example, the impressive developments in semiconductor technologies continue to produce

processing microprocessors with increasing capacities, while at the same time shrinking in size. The miniaturization of computing and sensing technologies enables the development of tiny, lowpower, and inexpensive sensors, actuators, and controllers. Further, embedded computing systems (i.e., systems that typically interact closely with the physical world and are designed to perform only a limited number of dedicated functions) continue to find application in an increasing number of areas. While defense and aerospace systems still dominate the market, there is an increasing focus on systems to monitor and protect civil infrastructure (such as bridges and tunnels), the national power grid, and pipeline infrastructure. Networks of hundreds of sensor nodes are already being used to monitor large geographic areas for modeling and forecasting concepts and techniques. As the field of wireless sensor networks is based on numerous other domains,



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it is recommended that Sensing and Sensors Sensing is a technique used to gather information about a physical object or process, including the occurrence of events (i.e., changes in state such as a drop in temperature or pressure). An object performing such a sensing task is called a sensor. For example, the human body is equipped with sensors that are able to capture optical information from the environment (eyes), acoustic information such as sounds (ears), and smells (nose). These are examples of remote sensors, that is, they do not need to touch the monitored object to gather information. From a technical perspective, a sensor is a device that translates parameters or events in the physical world into signals that can be measured and Another commonly used term is transducer, which is often used to describe a device that converts energy From one form into another .A sensor, then, is a type of transducer that converts energy in the physical world into electrical energy that can be passed to a computing system or controller. An example of the steps performed in a sensing (or data acquisition) task .Phenomena in the physical world (often referred to as process, system) are observed by a sensor device.

CONCLUSION

The proposed system presents a digital technology and modern techniques Attribute Based on digital scheme that is much more efficient than the previous systems. It provides convenient and fast option for Traffic Police to send the fine digitally within 10 seconds . In order to reduce inconveniency and manage the traffic rules of the city, the system provides modified outsourced GPS scheme which supports the and number plate detection. Results show that our system is proficient as well as practical.

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