



# DESIGN AND IMPLEMENTATION OF AUTOMATIC UNAUTHORISED PARKING DETECTOR USING GSM

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## 1. ABSTRACT

Now days The large numbers of personal and the deployed to check for the further unauthorized without any permission and the breaking the rules according to their secure and the parking of the system most of the owners are been evade the fine and find those who are doing like this it should not be correct for them The each every owners should be pay the fine if they were doing the wrong in case . But the most of the owners has been evade the fine by various and the illegal means and the it has been bribing like the personal and the threatening of the system them etc. town vans need to the manually search and illegally of the parked vehicles. This system has requires the more and large overhead and costs in the man power and the normal payment, The fuel and other physical and the other surveillance are been provided . Here we propose The normal and the huge of the . The system that allows for no parking and automatic illegal parking detection and alerting. The system consists of the integrating an radio frequency of the identification and the transmitter in every vehicle it has been provided . The RFID receiver and the circuit is mounted on every area where parking is prohibited. If a vehicle is parked in an area where parking is prohibited the RFID and the receiver and the transmitter comes in range of the receiver circuit and it been work in the processes. Once this happens in the RFID The reader has been reads transmitter id it can be comes in the range of automatic unauthorized system and it can instantly provide the alert and the authority with area code and locked the engine with their circuits and the given inputs . so that the authorities can be directly arrive at the spot and sends a SMS to the car owner after paying the amount the vehicle has been released about the fine imposed on the vehicle. After receiving the amount police or RTO Department only release the engine lock. IR sensor wil be absorbed and used to detect the no parking area from where to where.

**Keywords:** Power supply block, Arduino, LCD, RFID with cards, HT12E/12D with RF Transmitter, IR Sensor module, GSM Modem, Resistors& Capacitors.

## 2. I.INTRODUCTION

A large number of the personnel and the departments has to check the. A very large number of the deployed and to check the for unauthorized parking it has been fine to those owners. But The most of the owners are been evade the fine by various illegal and means like means like bribing and the personnel, And the threatening of them they cannot take the vehicle without the parking etc. The Town vans need to be search the manually for the each and every vehicle it has been search for illegally parked vehicles in the Towns. This system requires The large number of overhead and costs like the manpower and the payment, fuel and the other physical surveillance are been provided for the each and every parking zone and the normal secured of the system . Here we propose that a system must allows the for a and the automatic and illegal parking detection and The alerting. The system Must consists of integrating an RFID transmitter and the receiver and in the each and every vehicle. RFID receiver and the circuit is mounted on the every area where parking is prohibited. If the vehicle is been parked in an no parking area and the where parking is prohibited and the RFID transmitter comes in range each an every receiver of the circuit. Once this receiver and the happens the RFID reader reads owner



information the transmitter id and it can be instantly alert the authority and with the area and code and locked the engine the vehicle is been released by the police so that the authorities can be directly arrive particular at the spot and they will collect the fine And sends a SMS to the car owner about the fine which has been imposed on the vehicle. After receiving the amount police only release the engine lock. IR sensor is used to detect the no parking area from where to where. By increasing of the vehicle theft should be increased to getting worried about the theft vehicle (vehicle user). One of the main reason for this situation the user is facing the hard way of the secure parking for lot of vehicles. Therefore in this paper we are providing the GSM technology to get the conformation to overcome their weakness. It is easy for the unauthorized to take vehicle out. The GSM modem is used to send the SMS to the RTO department or the police department to get to know that the vehicle has been parked in the no parking area. After receiving the SMS they will take the action on the particular person that who as been parked the vehicle in no parking area. If the owner has to take the vehicle he should pay the fine through the online or of line. After that only he can remove the vehicle from the particular place, or else if the owner won't pay the fine the engine will be locked. By this project we can save the man power, bribing, Threatning. By this system there will be less traffic the public should be known that this system has been implemented. They will be away from laziness and follow the rules.[1] We have referred this they have been done this project on the management of the parking system they were been receive the signal from normal notification of the method [2] This project has been done through the RFID and sensors and the mechanics of the automation they have been implemented by using the automation of the system This paper has been by using the microcontroller and the GSM and it has been very secure for the Theftning vehicle [4] This paper has been done through the smart parking of the management system it has been used mostly in the smart cities done through the microcontroller [5] This project has been done through the smart parking of the communication of the system by using smart sensors and IOT Telecommunication system [6] This paper has been referred as the simulation environment of the system it has been done through microcontroller and the environmental normal system [7] This project has been done through the using the IR sensors and microcontroller system and normal based system like the city parking system and smart technology [8] This project has been based upon the ultrasonic system and the smart parking of the system it has been implemented through the ultrasonic system of the normal based project [9] This project has been through the optical wireless sensor and the microcontroller of the system it can be used as the smart parking of the system [10] This paper has been done as the wireless network and proposed system it has been implemented through the wireless network This paper has been based upon the smart parking and the traffic control and signal processing of the system spot detection based on the video analytic of the system [12] This project has been done through the home automation of the normal controlling method and implemented through the normal based sensors and the IR sensors[13] The project has been based upon the normal secure of the parking system are been implemented through smart parking system and the it has been done through the microcontroller and the RFID of the system [14] This paper has been referred as the wireless telecommunication of the processes system and it has been used in the smart cities and normalized method It have been done through the SMS sender and the receiver of the processed system it can be implemented through the sensor detectors [16] The GSM and the normal module of the system are been done through the using the IOT based and the normal system of the method has been done it been useful for the secure parking of the system [17] It is the dynamic street parking organization and been done in the using the method logy and recognized of the system it has been mainly stands for the implementing of street parking system [18] A smart parking of the system are been through the IOT Based protocols and the telecommunication of the system and also it has been implemented through the wireless technology of the system [19] The parking management of the frame work of the system are been done through pic microcontroller based and GSM based of the system [20] This paper has been referred that the it has been done through the using ARDUINO and the Microcontroller it has been implemented through this system it has been mainly used in the smart cities like rural areas by this method .

### 3. II .LITERATURE REVIEW

In this paper, The main demonstration and the secure parking reservation of the. The system which it has been using the Global and normal System for the Mobile communications and the (GSM) technology which it has

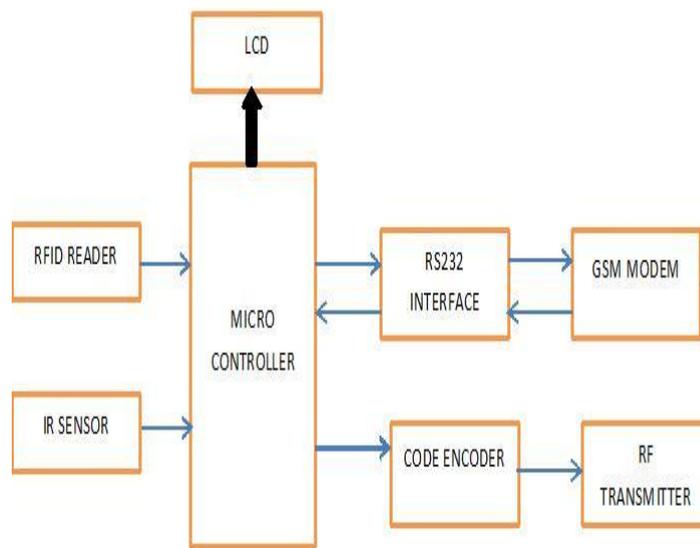


been performed. It helps the so many drivers from no parking area and facing the problems and that can always occurs at the car parking, such as the time being wasted in the searching for the places like it should be available the parking spaces and the it keep on circling the parking area until they found the an empty parking .places they should be fined if they are been parked In the no parking area.the lazy ness should be decreased from the public.[1]the increased of the some of the theft vehicles has been getting worried the theft vehicle. The security is that the main issue of that the lack in the many of the problems. there are the so many of the methods to resolve this problem.in[2]the authors used the ARDUINO . The techonology as a communication code to get online to order the reserve and the no parking lot .the weakness of this project is that they cannot park the vehicle in the no parking area .people should be aware of doing this they will the must rules and regulation.[3]this flowchart involves the configuration of the microcontroller-III

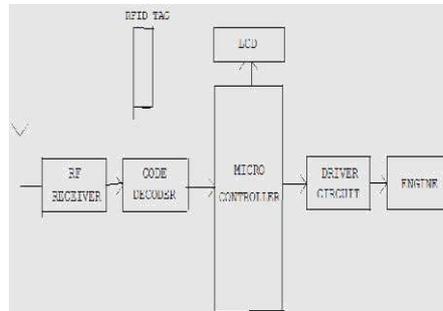
**.PROPOSED SYSTEM**

The main motivation of the project is the is to activate and maintain the security of the parking system and the area also been reduce the parking system.the authorized vehicles are been identified with the help of the registration processes .This system has the lack of the security for existing the process because of the car can be easily exist the sensor detection can be the detection and .it is main purpose of the unauthorized person to take any car out. The users will receive the information .if the car has to remove from the particular place he should unlock the vehicle (RTO DPTMNT or POLICE) they should unlock the vehicle by capturing their RFID reader and they can take the vehicle Based on the attacks of data, two different the overall functionality of the system are should according to their functionality of the system ,all of the information should related to the vehicle checking of the parking detector ,when the vehicle is been about to check the out from parking zone .In case already registered vehicle, vehicles RFID is been absorbed to the sensor the drivers are been abended of their trips of the proposed because of the annoying of the endless parking searches and home drivers they park their in the unauthorized areas .the main cities like on should be Avade the parking zones of the system the city in the main vain like have started the smart parking of the system ,only the 5% and Tokyo has scarce of the smart parking of the system cities with the the more than than on street parking.

**4. IV . METHODOLOGY**



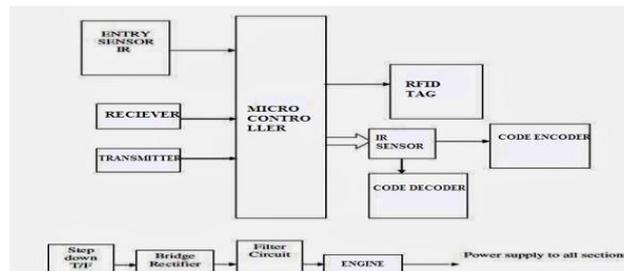
**Figure: 1 schematic diagram of parking unit**



Figure; 2 The Schematic diagram of car unit

The design and implementation of automatic unauthorized parking detector using the microcontroller now days every on their been parking their vehicle in the no parking area not paying the fine ,and they were doing the some of the bribes with out paying fine to the particular police or government department ,but this is the case is not like that ,the who ever it may be they should be pay the money If the were following their rules means it should been taken the sever action and the payment should be pay by through the online or offline mode after paying the money ,the police man will come and release the vehicle .If the customer is been not pay the money their engine will be locked and the vehicle should be placed their only up to your paying the money the engine will be locked

## V. ALGORITHM



This block diagram indicates that the processes is been done properly are the not ,it has been implemented that the each and everyone has been provided the notification through the SMS and other methods this processes can be done through the ,implemented through using the microcontroller (ARDUINO) it can be worked as per the processes of the using the GSM MODULE ,when the vehicle has been parked in the no parking area it should be come in to the work processes and collect the data from the owner and send to the particular persons the authority of these work it should be taken action with in the minutes and everything comes to be function

## VI. RESULT AND DISCUSSION

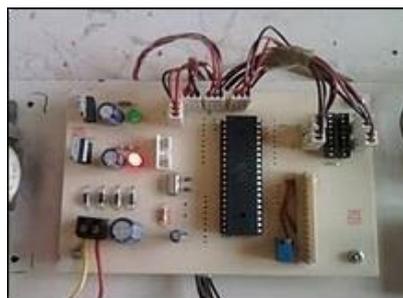
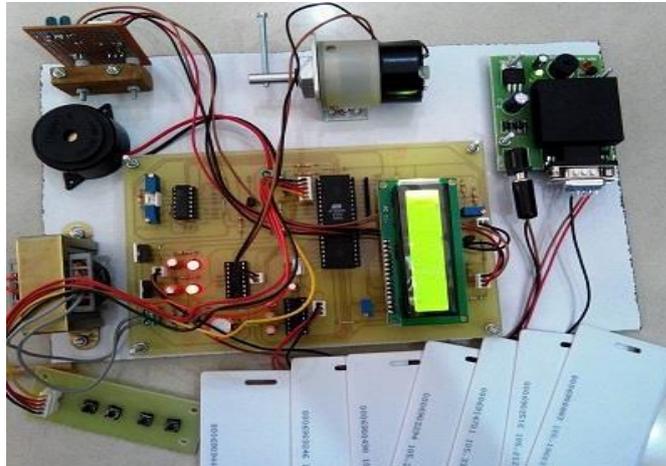


Figure .1 partial output of the no parking unit



**Figure 2. partial output of the both car unit and parking zone**

After giving the partial output of the no parking unit we have received the some idea about the no parking area of the unit the lights are been blinked when the vehicle has been entered in the no parking area then the everything should be comes under the working and its takes the action on the no parking area of the unit and some of the lights are been blinked that the it has been action on this rules breaking ,it should be less stress power to the police department and they were been no need of standing in the traffic zones to fine the vehicles ,the information has been easily send to the department

## VII . CONCLUSION

This can be implemented at a large scale on all the parking areas and can be helpful in reducing the affects of vehicles parked in the “NO PARKING ZONE”.It can also be used a product in measures to collect fines easily when the vehicles are not parked properly.This project work can bring a revolution to the road safety measures related to parking of vehicles in an ethical way.This will help the future aspects of the jamming of roads and streets due to parking of cars anywhere which causes a lot of traffic on the roads.

## REFERENCES

- a. N. Larisis, L. Perlepes, P. Kikiras, and Stamoulis, “U-Park: The Parking management system has been based on the wireless sensor network technology,” in *Intl Confon Sensor Technologies and Applications*, 2012, pp. 170–177.
- b. W. Zhao, “Parking management system done with the rfid and sensor networks no parking system,” in *Applied Mechanics and Materials*, vol. 198-199, 2012, pp. 1690–1696.
- [2] Y. M. Zhao, R. Gao, J. Zhu, T. Ye, F. Ye, Wang, K. Bian, G. Luo, and M. Zhang, “VeLoc: Finding your car in the parking with usig the GSM and microcontroller its been secure for the A lot,” in *ACM Conf on Embedded Network Sensor Systems*, 2014, pp. 346–347.
- [4] S. Gupte and M. Younis, “Participatory-sensing-enabled efficient parking management Of the system are been done in the modern cities,” in *IEEE Conf on Local Computer Networks*, 2015, pp. 241–244.
- [5] R. Salpietro, L. Bedogni, M. D. Felice, and L. Bononi, “Park here! a smart parking of the system are been based on smartphones’ embedded and sensors and short range communication technologies,” in *IEEE World Forum on Internet of Things*, 2015, pp. 18–23.



- [6] K. Farkas and I. Lendak, "Simulation environment for the of investigating crowd-sensing and based urban parking," in Intl Conf on Models and Technologies for the normal Intelligent Transportation Systems, 2015, pp. 320–327.
- [7] J. Krieg, G. Jakllari, H. Toma, and A. Beylot, "Unlocking the smartphone's and senses the ir sensor and for smart city parking," in IEEE Intl Conf on Communications, 2016, pp. 1–7.
- [8] A. Kianpisheh, N. Mustafa, P. Limtrairut, and P. Keikhosrokiani, "Smart parking system (SPS)It has been using architecture using ultrasonic detector," Intl J. of The Software Engineering and Its been Applications, vol. 6, no. 3, pp. 55–58, 2012.
- [9] J. Chinrungrueng, U. Sunantachaikul, and S. Triamlumlerd, "Smart parking: It has been An application of the optical wireless sensor and network," in Intl Symp on the Applications and the Internet Wksp, 2007, pp. 66–66.
- [10] V. Boda, A. Nasipuri, and I. Howitt, "Design and the considerations for a wireless sensor network and for locating parking spaces," in IEEE Southeast Conf, 2007, pp. 698–703.
- [11] X. Sevillano, E. Marmol, and V. Fernandez-Arguedas, "Towards The smart traffic management And systems:
- [12] Vacant on-street parking and the spot detection based on video analytics," in Intl Conf on Information Fusion, 2014, 1–8.
- [13] T. Nguyen and C. Nguyen, "An approach for building an intelligent The parking has been support system," in Symp on Information and the Communication of Technology, 2014, 192–201.
- [14] D. bong, k. Ting, and K. Lai, "Integrated approach in the design of The car parking and the occupancy has been the information system (COINS)," IAENG Intl J. of Computer Science, vol. 35, no. 1, pp. 7–14, 2008.
- [15] \E. Moguel, N. preciado, and the J. Preciado, " The Smart And the parking campus: An the example of the integrating different and the parking types sensing solutions into a single scalable of the system," ERCIM News Smart Cities, pp. 29–30, 2015.
- [16] K. Ma, y. kim, and h. Cha, "Acoustic sensor of the network-based parking lot surveillance of the system," in Wireless Sensor Networks, ser. LNCS. Springer, 2009, vol. 5232, pp. 247–262.
- [17] P. Kumar and T. Siddarth, "A prototype of the parking system HAS Been implemented using the wireless sensor and the networks," in Intl Joint J. Conf on Engineering and the Technology, 2010.
- [18] n. Pazos, n. Muller, m. Favre-Bulle, k. Brandt-Dit-Grieurin, O. H' usser, M. Ae- berli, and N. Ouerhani, " The Dynamic of the street-parking are been optimisation," in IEEE Intl Conf on Advanced Information of the Networking and Applications, 2016, pp. 1020–1026.
- [19] L. mainetti, l. Patrono, M. Stefanizzi, and R. Vergallo, "A smart parking of the system are been based on The iot protocols and emerging enabling technologies," in The IEEE World Forum on Internet of Things, 2015, pp. 764–769.
- [20] J. Chinrungrueng, s. Dummin, and s. Pongthornseri, "IParking: A parkssing management of the framework," in Intl Conf on ITS Telecommunications, 2011, pp. 63–68.

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- [21] I. Ganchev, n. O'Droma, and d. Meere, "intelligent car parking of the locator of theseservice," Intl J Information Technologies and the Knowledge, vol. 2, pp. 166–178, 2008.