Wireless Spy Robot

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***Abstract*: In this project our aim is to use the Wireless connectivity for controlling our spy robot. Our spy robot can also be used in military as a weapon.Our robot detects the enemy, as we have placed wireless camera on the robot it genrates the real time video which is viible to the robot operator. If the robot operator seen any enemy as also he an also shoot as the gun and harmful poisionous gas is placed on the robot.In this scenario making a mobile phone operated Robotic Car with GUN mounted on it is good idea. Conventionally, wireless-controlled robots use RF circuits, which have the drawbacks of limited working range, limited frequency range and limited control. Use of a mobile phone for robotic control can overcome these limitations. It provides the ad vantages of robust control, working range as large as the coverage area of the service provider no interference with other controllers. Generally, the preceptors are sensors mounted on the robot, processing is done by the on-board micro controller or processor, and the task (action) is performed using motors or with some other actuators.**

***Keywords*: ESP32, Battery, Wireless Camera, Mobile phone, Motor Drivers.**

1. INTRODUCTION

The main purpose of this project is to develop a remote user interface to control a Robot via a wireless technology. There is a need to communicate with the robot remotely in order to control the robot movements and pass critical data both ways.In this project our aim is to use the Wireless connectivity for controlling our spy robot. Our spy robot can also be used in military as a weapon.Our robot detects the enemy ,as we have placed wireless camera on the robot it genrates the real time video which is visible to the robot operator. If the robot operator seen any enemy as also the operator can also shoot as the gun and harmful poisionous gas is placed on the robot.The word "robot" originates from the Czech word for forced labour, or serf. Playwright Karel Capek, whose fictional robotic inventions was much like Dr. Frankenstein's mon-ster—creatures created by chemical and biological, rather than mechanical, methods, introduced it. But the current mechanical robots of popular culture are not much different from these fictional biological creations. Industrial automation gives Robotics a considerable momentum to explore newer avenues of applications. Robotics is being used for industrial automation to extent that the terms robotics and industrial automation have became synonyms in the industrial world .the advance made in the field of mechatronics has virtually made sign of robotic system much easier. The need is only to identify right product for application. Robotics is a design and manufacture of intelligent machines that are programmed to perform specific tasks. Robots are generally designed to be a helping hand. They help us in difficult, unsafe or boring tasks. Simply put robots are machines that can perform variety of jobs and they can range from simple machines to highly complex computer-controlled intelligent systems.

2. LITERATURE SURVEY

Intelligent combat robot 2015: It has described to develop a robotic vehicle using RF technology for remote operation attached with wireless camera for monitoring purpose. The robot along with camera can wireless transmit real-time video with night vision capabilities. This is kind of robot can be helpful for spying purpose in war fields. In this technolgy as robot can only controlled in 10 meters.

Bluetooth controlled robot: A new classification algorithm was proposed to improve the range of the robot with the increased speed.In this technology the,there was frequentb loss of connectivity of the camera..

AwabFakih, JovitaSerraohave proposed the mobile operated vehicle is a concept where a human being can control a vehicle by an android app by remote or wireless operation, without physically being seated inside it. The project comprises of a vehicle powered by a battery and a controller which has a bluetooth connectivity. The system consists of a controller equipped by bluetooth communication IC, it will be connected to the motors and other parts of vehicle. When an android app which will be connected to this system by bluetooth is switched on one can operate the vehicle by wireless commands given from app. The operation range of bluetooth is around 10 meters or 33 feet approximately.

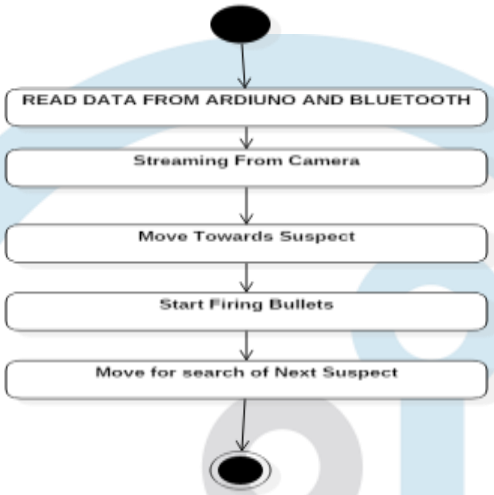
Dr. S. Bhargavi and S. Manjunath, Electronics and Communicationthe objective of this paper is to minimize human casualties in terrorist attack such as 26/11. The combatrobot has been designed to tackle such a cruel terror attacks. This robot is radio operated, self- powered, and has all the controls like a normal car. A wireless camera has been installed on it, so that it can monitor enemy remotely when required. It can silently enter into enemy area and send us all the information through its' tiny Camera eyes.This spy robot can be used in star hotels,shopping malls, jewellery show rooms, etc where there can be threat from intruders or terrorists. Since human life is always precious, these robots are the replacement of fighters against terrorist in war areas.

3. PROBLEM STATEMENT

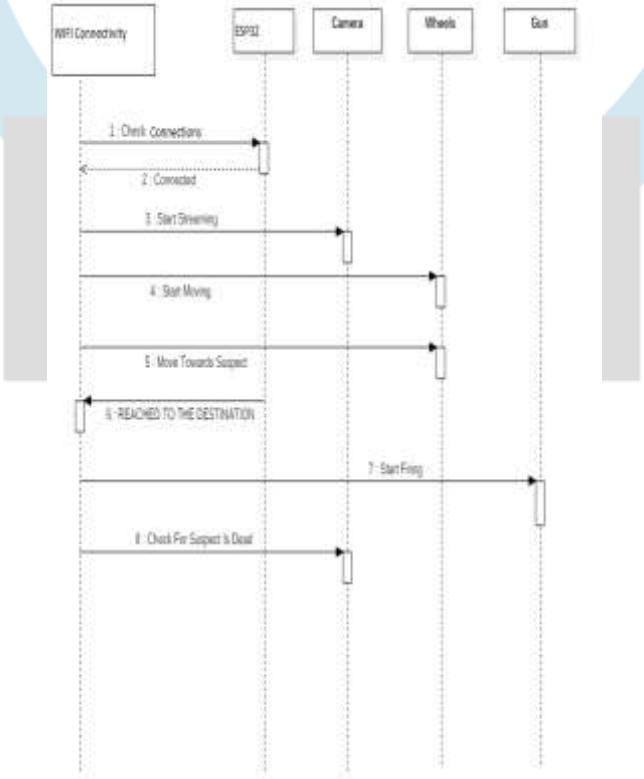
Tanks and Infantry Combat Vehicles are being employed at High Altitudes. The rarefied atmosphere and reduced oxygen content results in degraded engine performance and de-rating of the engine many algorithms and methods have been proposed for the spy robot in the literature. Some of the spy robot features have negative contribution in the final results.

4. METHODOLOGY

In this project our aim is to use the Wireless connectivity for controlling our spy robot. Our spy robot can also be used in military as a weapon.Our robot detects the enemy ,as we have placed wireless camera on the robot it genrates the real time video which is visible to the robot operator. If the robot operator seen any enemy as also the operator can also shoot as the gun and harmful poisionous gas is placed on the robot.



4.1 ALGORITHM



4.2 BLOCK DIAGRAM

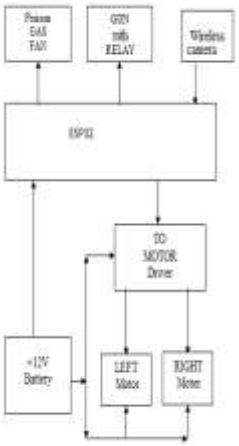


Fig. Block Diagram of Existing System.

5. HARDWARE AND SOFTWARE REQUIREMENTS

- ESP32
- Camera
- Power Supply
- Motor Driver
- Bluetooth
- Gun with relay
- Poison gas fan

5.1 HARDWARE IMPLEMENTATION

In this system, power supply is used to provide the power to the whole circuitry like ESP32, relay, transformer, resistors, capacitors are the main components used for designing the system.

5.2 SOFTWARE IMPLEMENTATION

For Software Implementation we have used the software "Arduino IDE". In Software Implementation, The main part is programming of the "Arduino r3" and interfacing of each device like LCD Display, Relay and Transformer with microcontroller. Once the power supply is given hardware circuit is gets initialized.

6. RESULT ANALYSIS

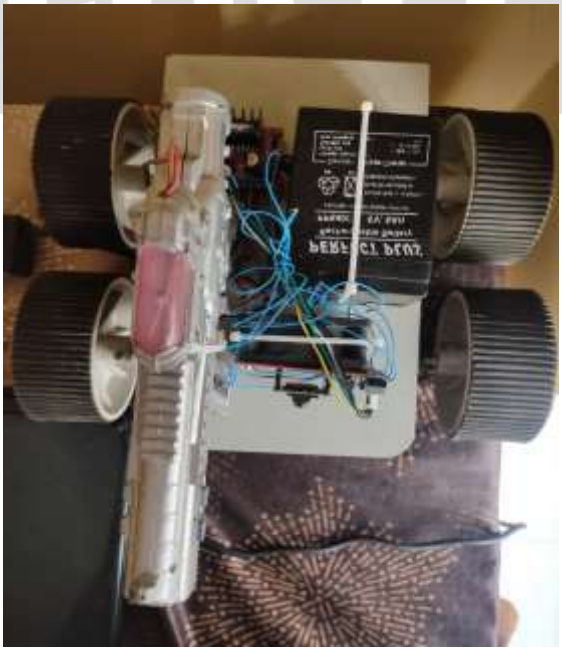


Fig. display.

7. CONCLUSIONS

In today's situation India is sick o massive terror attacks, bomb explosions at the resorts or at public places. Technological power must be needed to avoid such terror attacks. It's our duty to take an initiative to design a model of a suitable robot that meets combatant needs.

Security at high density areas it's wise to maintain a world class military technology in accordance with combatant needs to avoid terror attacks and to ensure more. Technological power must exceed human power to avoid such disasters. Human life and time are important. Even every nation needs its own defense system for their integrity and security

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