PROJECT REPORT ON

"MICROCONTROLLER BASED SURVEILLANCE ROBOT FOR A MILITARY APPLICATION"

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ABSTRACT

In the constant effort to safe guard the country against enemy attacks and terrorists, defense forces have to be equally power full to the enemy countries. For the strengthening of the defense power there was immense need for the non human war machines such as missiles and rockets, which could track the enemy target and destroy them in order to safe guard the country.

This project is mainly designed for surveillance of ground in military applications. The important devices that we have used on the robot are GPS, wireless camera, two pairs of RF transmitter-receiver, temperature sensor. If the intensity of the light is less while performing video streaming, then additional lights can be switched on wirelessly. The robotic movement can be controlled wirelessly by the user with the buttons provided on the user module via RF. Along with the GPS readings, the robot also senses the temperature of the robot's surrounding. All the four wheels are energized. Hence, the robot is able to rotate about 360 degree on stand.

The project presented by us is an advanced Robotic system which can be controlled through RF signals and the robot's geographical position can be continuously monitored by GPS. The proposed prototype has a wide application such as, military ground surveillance in naxal threatened area, no man's land between international borders, hijacked buildings. It can also be used to study animals, Stand alone security systems, Safety monitoring in industries, Continuous monitoring of epidemic patients who are kept isolated.