

# Night Patrolling Robots

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**Abstract:** This paper is an overview of project night patrolling robot. The designed control module comprised software and hardware. The system uses cameras and a motion detector mounted on a robotic vehicle for securing any premises. The robotic vehicle moves at a particular path and is equipped with a camera and object detector sensors. It uses a predefined line to follow its path while patrolling. The system uses IR based path following system for patrolling assigned areas. It monitors each area to detect any problem using HD cameras. It scans the area using its camera to detect any human faces detected. It captures and starts transmitting the images of the situation immediately to the IOT website. And it can control by its owner. Thus we put forward a fully autonomous security robot that operates tirelessly and patrols large areas on its own to secure the facility.

**Keywords:** Night safety, patrolling area, robotics, motion detector, Wi-Fi module.

## REFERENCES

- [1]. "Building Internet of Things with the Arduino" by Charalampos Doukas Wireless Sensor Networks
- [2]. "Programming and Customizing the AVR Microcontroller" by Dhananjay Gadre
- [3]. "Building Wireless Sensor Networks Using Arduino" by Matthijs Kooijman
- [4]. "Practical AVR Microcontrollers: Games, Gadgets, and Home Automation with the Microcontroller Used in Arduino" by Alan Trevennor
- [5]. <https://www.battery-direct.com/battery-bp1.2-12.html>
- [6]. [https://www.googleadservices.com/pagead/aclk?sa=L&ai=DChcSEwiQ8qar3p7-AhUMT5EKHUWwAPkYABAAGgJjZQ&cit=CkQKCAjwxMmhBhBGEjQAs0z-xBUY-AnxSQyhTY9MjKizG2Wrb5dOfHRg9Ifj8X1Je0FMjaLxm97z\\_brRT8fwvXdFGgIJ3vD\\_BwE&ei=erMzZIXRNbuhseMP5ee9KA&ohost=www.google.com&cid=CAESbOD2imYFHgYV\\_IM6O7YY0Z9yBnV8j1tyU1pS7ZjFsSBgxu3FgYGm9bsDT5JDwm-C-rG844-NwpPOJKLGetvfBcocz0pEcDvDDnf5MkawDR76OvAjW0zle1CO9g14fSQJc1YSVzF-HVn2RPcy8A&sig=AOD64\\_3DA0QKAHDeWsCw5ENnsUirDLS2cA&q&sqi=2&adurl&ved=2ahUKEwiF9par3p7-AhW7UGwGHeVzDwUQ0Qx6BAGGEAE](https://www.googleadservices.com/pagead/aclk?sa=L&ai=DChcSEwiQ8qar3p7-AhUMT5EKHUWwAPkYABAAGgJjZQ&cit=CkQKCAjwxMmhBhBGEjQAs0z-xBUY-AnxSQyhTY9MjKizG2Wrb5dOfHRg9Ifj8X1Je0FMjaLxm97z_brRT8fwvXdFGgIJ3vD_BwE&ei=erMzZIXRNbuhseMP5ee9KA&ohost=www.google.com&cid=CAESbOD2imYFHgYV_IM6O7YY0Z9yBnV8j1tyU1pS7ZjFsSBgxu3FgYGm9bsDT5JDwm-C-rG844-NwpPOJKLGetvfBcocz0pEcDvDDnf5MkawDR76OvAjW0zle1CO9g14fSQJc1YSVzF-HVn2RPcy8A&sig=AOD64_3DA0QKAHDeWsCw5ENnsUirDLS2cA&q&sqi=2&adurl&ved=2ahUKEwiF9par3p7-AhW7UGwGHeVzDwUQ0Qx6BAGGEAE)