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### **RESEARCH ARTICLE**

# **A Surveillance Robot with Climbing Capabilities for Home Security**

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#### **ABSTRACT:**

Automation and security is getting the highest priority all over the world. Automation and security at various places like home, office etc can be achieved by using different types of surveillance robots. Most of the traditional surveillance robots have problems with obstacle avoidance and staircase. This paper presents the development of the surveillance robot with staircase climbing capability. The proposed robot can climb up stairs of certain height and width proportional to the dimension of the robot. The proposed robot uses wireless camera, LPG gas sensor, PIR sensor for surveillance purpose and wireless serial RF modem for wireless data communication. It can provide the reliable range of 30 m at 2.4GHz band.

**Key Words:** Stair case Robot; Home surveillance; Automation; RF modem

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