ROPE CLIMBING ROBO WITH SURVEILLANCE CAPABILITY

ABSTRACT

In the past different engineers and researcher developed robots capable of climbing for various purposes. In this paper we have developed a robot capable of rope climbing in both horizontal and vertical direction. Furthermore, the robot has the ability to perform surveillance using a camera mounted on top of the robot. The quality of the transmitted video from the camera to the computer is clear and stable. Hence the developed robot is a good choice for surveillance purposes. In addition, it can be used to traverse floors of a building. It uses an IR sensor to sense strips attached at each floor. Once the strips are sensed, a dropping mechanism is activated in which a specific object is dropped to the targeted floor or location. The robot can work in automatic mode or manual through RF signals from an RF transmitter. Finally the robot is cost effective compared to many other developed robots for rope climbing.