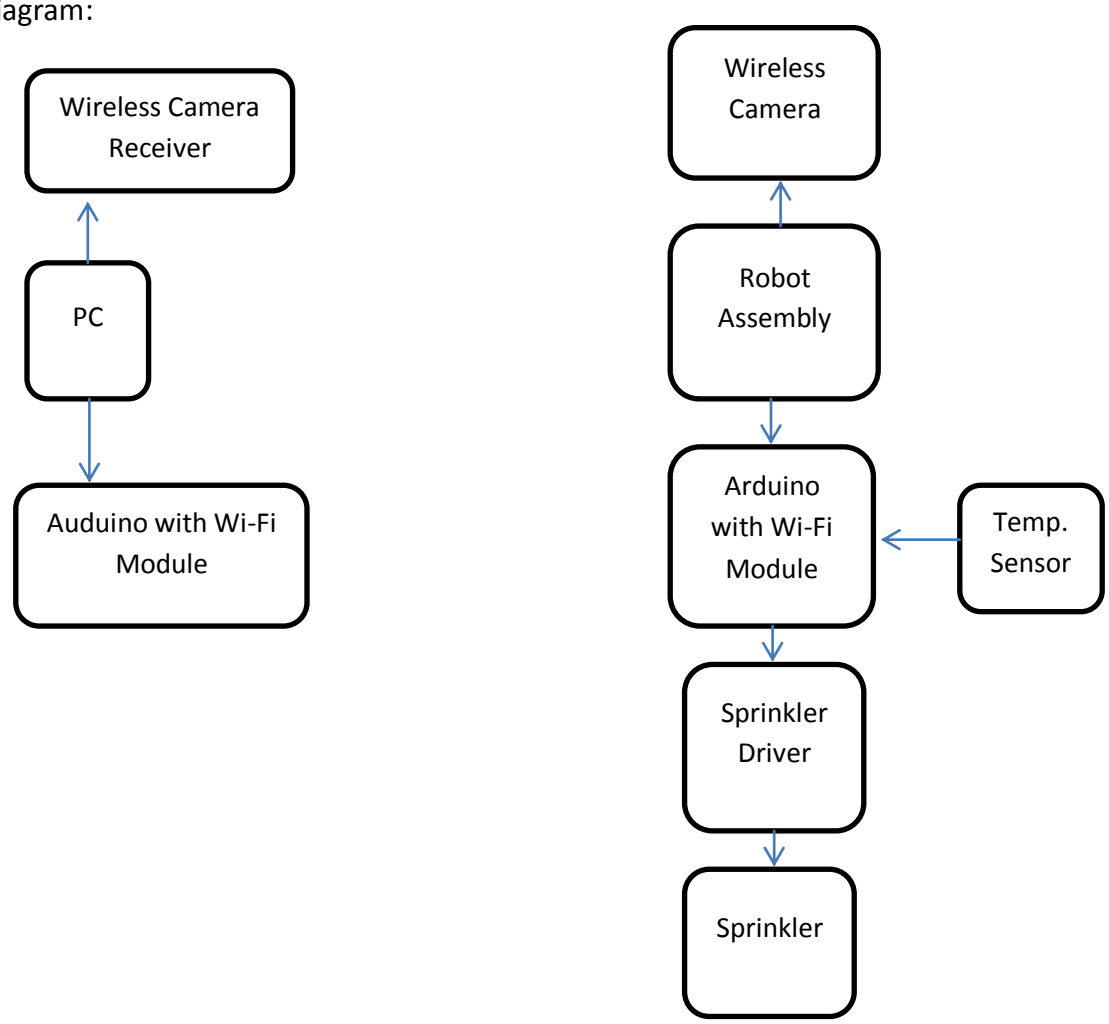
Multipurpose Robot

Introduction

Most of the applications are getting automated and robotics is playing important role in it. Here we are developing multipurpose robot which will control by Wi-Fi (IoT). The robot will be used for surveillance purpose through wireless camera. The project also used to detect fire using heat sensor. If temperature is above certain limit the robot will spray water.

The robot is also used for agricultural purpose. The robot will identify the leaves of plant and used to spray chemicals on the plant only. To detect the leaves image processing will be used. To capture the image wireless camera will be used. The user can control the robot using wireless technology.

Block Diagram:



Particularly there are two sections which are connected wirelessly. PC with matlab program is used to communicate with the robot. Wireless camera receiver is interfaced with PC which takes image and video information from wireless camera interfaced with robot assembly. Commands to robot can be send through Wi-Fi module interfaced with arduino. The robot will receive commands through Wi-Fi module and act accordingly. The robot can also act autonomously and sense temperature, if temperature is above certain limit the robot will spray water.

The robot can also be used for surveillance purposed. The robot can transfer video at monitoring station. The same can be observed and action can be taken.

The robot is also used for agriculture purpose. The robot can transfer images that can process and leaves can be identified and fertilizers can spray on the crop.

In this way we can use this robot for different purposes.