

WSN BASED ADVANCED IRRIGATION VEHICLE - AGRIBOT

INTRODUCTION

Agricultural Robots or **agribot** is a robot deployed for agricultural purposes. The main area of application of robots in agriculture is at the harvesting stage. Fruit picking robots, driverless tractor / sprayer, and sheep shearing robots are designed to replace human labor. In most cases, a lot of factors have to be considered (e.g., the size and color of the fruit to be picked) before the commencement of a task. Robots can be used for other horticultural tasks such as pruning, weeding, spraying and monitoring. Robots can also be used in livestock applications (livestock robotics) such as automatic milking, washing and castrating. Robots like these have many benefits for the agricultural industry, including a higher quality of fresh produce, lower production costs, and a smaller need for manual labor.

ABSTRACT

This robotic vehicle is an agricultural machine of a considerable power and great soil clearing capacity. This multipurpose system gives an advance method to sow, plow, water and cut the crops with minimum man power and labor making it an efficient vehicle. The machine will cultivate the farm by considering particular rows and specific column at fixed distance depending on crop. Moreover the vehicle can be controlled through Bluetooth medium using a Android smart phone. The whole process calculation, processing, monitoring are designed with motors & sensor interfaced with microcontroller.

ADVANTAGES :

- 5 Different features in one module
- Wireless communication between robot
- Can be used for cultivating, harvesting, Seed Flowing, Water Pump and Wheat Harvesting.

CONCLUSION:

This multipurpose system gives an advance method to sow, plow and cut the crops with minimum man power and labor making it an efficient vehicle. The machine will cultivate the farm by considering particular rows and specific column at fixed distance depending on crop.

TECHNOFIST