

Agriculture Robot

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Abstract: *The agricultural robot is used to reduce human efforts made by farmers during farming. There are many aspects to the future of this Agri-bot. Agriculture is considered one of the most important economic activities in India. The bot uses various techniques that help us track the various activities involved in the farming process such as soil moisture level, soil type, different nutrients levels in the soil, suggestion of the crop to be cultivated. The multi functionality of the robot will also help the farmer use the same robot to extract weeds, maintain records on soil data, and make it available at any time as it will be stored in a cloud server. Farmers using bots will be easier to monitor the field. In recent years, robotics in agriculture sector with its implementation based on precision agriculture concept is the newly emerging technology. The main reason behind automation of farming processes saving the time and energy required for performing repetitive farming tasks and increasing the productivity of yield by treating every crop individually using precision farming concept. Designing of such robots modelled based on particular approach and certain considerations of agriculture environment in which it is going to work. These considerations and approaches are discussed in this project. Also, prototype of an Agriculture Robot is presented which is specifically designed for seed sowing task only. It is a four wheeled vehicle which is controlled by microcontroller..*

Keywords: IoT, Arduino, Soil Moisture Sensor, Wi-Fi module

