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## Patent Search

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#### Abstract:

ABSTRACT In agricultural production and administration, robotics plays an important role. Automated and time-saving agriculture technology has to be efficiently made use of emerging technologies in many domains is an essential process. However, the use of sensor-based technology is not new in agriculture. Due to the varying variables like climate, soil, water, and land; various models, analytical techniques, and strategies are necessary. In designing a solution for diverse situations, several distinct approaches are necessary particularly for agriculture. The idea of Smart agricultural technology and its usage for agriculture is far larger than IOT and Raspberry pi. In addition to the speed and efficiency of the operation, AGRIBOT is developed for farmers' use and minimizes the work of farmers. It fulfills the main requirement of farming, i.e. crop fertility monitoring, soil records of every condition, and crop disorder detection. Because that may be regulated remotely from any location without laboring in the field, exposure to pesticides, the farmer will benefit. His health will remain unaffected. By removing the disease from cultivation, a farmer is getting more productive products and maximizes farmers' wealth. That may be described as a progressive step in agriculture that prevents the shortage of food, attracts young people, and reveals the scene of the future.

#### Complete Specification

- Claims:1. The objective of this innovation is to implement an agricultural robot based on Smart IoT that assists farmers in obtaining live data (temperature, soil moisture) to monitor efficiently crop health, thus making smart farming possible and increasing their overall output and quality of products.
2. The second aspect of this innovation is that it can be adapted to any crop variety and is dependable with the assistance of IoT to regulate everything in the field also more secure.
3. The third aspect of this innovation is to minimize the time necessary to monitor the health of crops and to detect agricultural conditions using IoT technology.
4. The fourth aspect of this invention is that the raspberry pi can use both the camera and the field to calculate all sorts of data detected by the given sensor.
5. The five aspects of this innovation include data such as temperature, humidity, rainfall, soil humidity; light intensity plays an important part in predicting crop growth and crop production.
6. The sixth aspect of this invention is that this data may be calculated to improve the monitoring of crops using raspberry pi. Every inch of the field is provided live data to farmers through the user interface app and allows a longer time to monitor the fields.
7. The seventh aspect of this invention is the usage of solar panels during the nighttime to monitor the growth of crops by the rechargeable battery.
- , Description:FORM 2

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