IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 2, July 2022
Impact Factor: 6.252

IoT Based Plant Disease Detection and Smart Irrigation

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Abstract: *Green plants are imperative for the human environment. They form the basis for the sustainability and long term health of environmental systems. Thus, it is extremely essential to grow healthy plants. The plant disease could be cured if it is known in an advanced stage. In this paper, we have proposed a system using raspberry pi to detect healthy and unhealthy plants & alert the farmer by sending email. We have used tensor flow tools for numerical computation. It can be used in controlled environmental farms to detect the symptoms of disease whenever they appear on leaves of the plant. Water is the most essential contribution to upgrading agricultural productivity and therefore, expansion of the water system has been a key way to the improvement of farming in the nation. It is an important resource in human life. Around 80% to 90% of the water is used in agricultural fields. Due to gradual growth in globalization and population, water consumption is increasing. There is confront in front of every country to diminish the farm water consumption and provide fresh and healthy food. Currently, automation is one of the vital roles in human life. It not only provides comfort but also reduce energy, competence and time-saving. This propounds a design for an automated irrigation system for efficient water management and detection and prevention of diseases of plants from getting spread.*

Keywords: Detect healthy and unhealthy plants, Alert the farmers by sending email, Soil moisture sensing

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