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VISHVESVARAYA TECHNOLOGICAL UNIVERSITY
"JNANA SANGAMA", BELAGAVI-560014, KARNATAKA



Project Report (18EEP83) on

**"SOLAR BASED AUTOMATIC SEEDS SOWING SMART AGRICULTURE
ROBOT"**

Submitted in partial fulfillment for the requirement of the award of degree

**BACHELOR OF ENGINEERING
IN
ELECTRICAL AND ELECTRONICS ENGINEERING**

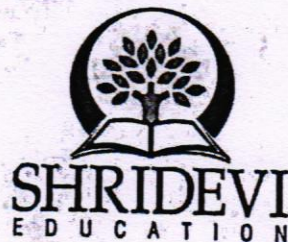
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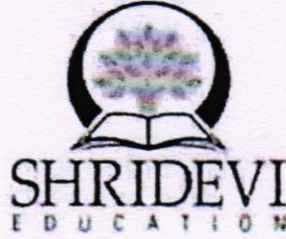
2021-2022

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CERTIFICATE

This is to certify that the project work entitled "SOLAR BASED AUTOMATIC SEEDS SOWING SMART AGRICULTURE ROBOT" has been successfully carried out by SHARATH H M (ISV19EE403), NETHRAVATHI S M (USN: ISV17EE006), SHOBHASHREE S (USN: ISV18EE011), MOHAMMED FAKRUDDIN (USN: ISV18EE004) the bonafide students of SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY TUMKUR-572106, in partial fulfillment for the award of degree of Bachelor Of Engineering In Electrical And Electronics Engineering Of The VISVESVARAYA TECHNOLOGICAL UNIVERSITY JNANA SANGAMA, Belagavi-560014 during the year 2021-2022. All the corrections suggestions indicated for the internal assessments have been incorporated in report. The project report has been approved as it satisfies the academic requirements in respect to the project work prescribed for the said degree.

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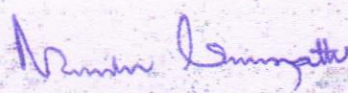
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ABSTRACT

Agriculture is the backbone of Indian economy. About half of the total population of our country has chosen agriculture as their chief occupation. The states like Maharashtra, Punjab, and Kerala, Assam are highly involved in agriculture. It all started due to the impact of, "Green Revolution" by means of which farmers came to know about the various techniques involved in farming and the advantages in it. As centuries passed, certain modern techniques were invented in agriculture due to the progress in science. These modern techniques included the use of tractors for ploughing the field, production of pesticides, invention of tube-wells etc. Since water is the main necessity in this scenario, techniques were discovered which would help in watering the field easily, consume less water and reduce human efforts. These discoveries improved the standard of living of farmers. Agro-Technology is the process of applying the technology innovation occurring in daily life and applying that to the agriculture sector which improves the efficiency of the crop produced and also to develop a better Mechanical machine to help the agriculture field which reduces the amount and time of work spent on one crop. Hence in this work of project we decided to design a better mechanical machine which is available to the farmers at a cheaper rate and also which can sow and seed the crop at the same time. This project consists of the better design of the machine which can be used specifically for sowing of soybean, maize, pigeon pea, Bengal gram, groundnut etc. For various agricultural implements and non-availability of sufficient farm labor, various models of seed sowing implements becoming popular in dry land regions of India. The success of crop production depends on timely seeding of these crops with reduced dull work of farm labor. The ultimate objective of seed planting using improve sowing equipment is to achieve precise seed distribution within the row. The aim / objective of this paper is to propose a Novel Smart IoT based Agriculture Stick assisting farmers in getting Live Data (Temperature, Soil Moisture) for efficient environment monitoring which will enable them to do smart farming and increase their overall yield and quality of products. The Agriculture stick being proposed via this paper is integrated with Arduino Technology, Breadboard mixed with various sensors and live data feed can be obtained online from Thingspeak.com. The product being proposed is tested on Live Agriculture Fields giving high accuracy over 98% in data feeds.



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