

SMART AGRICULTURAL ROBOT

A Project report submitted in partial fulfillment of the requirements for the
award of degree of

BACHELOR OF TECHNOLOGY

IN

ELECTRONICS AND COMMUNICATION ENGINEERING

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DEPARTMENT OF

ELECTRONICS AND COMMUNICATION ENGINEERING

AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

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TAMARAM(P.O), MAKAVARAPALEM(M.O), NARSIPATNAM(R.D)

VISAKHAPATNAM DISTRICT-531113,

2015-2019

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BONA FIDE CERTIFICATE

This is to certify that the project entitled "SMART AGRICULTURAL ROBOT" in partial fulfillment for the degree of Bachelor of Technology in ELECTRONICS AND COMMUNICATION ENGINEERING at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM is an bona fide work carried out by P.JAYALALITHA(15811A0455),CH.HEMANTH(15811A0412),G.VIMALA (15811A0422),A.CHAITANYA BABU (15811A0403) under the guidance and supervision during 2015-2019.


PROJECT GUIDE

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ABSTRACT

The main objective of the project is to develop and manufacture the robot in agricultural applications. The main area of application of robots in agriculture is at harvesting stage, digging, ploughing and seeding. This robot is purposely designed to reduce human labour. The jobs involved in agriculture are not straight forward and many repetitive tasks are not required to do so, so the agricultural industry is behind other industries in using robots.

This project 'SMART AGRICULTURAL ROBOT' represents a robot capable of performing operations like automatic ploughing, seed dispensing and sprinkling water. It also provides manual control when required. The main component used here is Microcontroller that supervises the entire process. Initially the robot digs the entire field simultaneously dispensing seeds side by side. On the field the robot operates on automated mode. For manual control the robot uses the PC as controlling device.