REAL TIME MOBILE APPLICATION FOR CLASSIFCATION AND MONITORING OF CROP DISEASES AND PESTICIDES INFORMATION THROUGH CROWDSOURCING WITH CROP YIELD PREDICTION

A PROJECT REPORT

Submitted by

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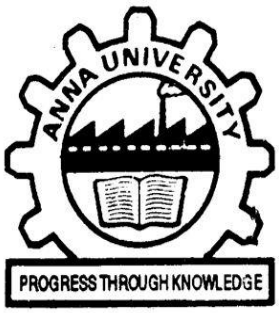
In partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

INFORMATION TECHNOLOGY



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APRIL 2019

BONAFIDE CERTIFICATE

Certified that this project report titled **"REAL TIME MOBILE APPLICATION FOR CLASSIFCATION AND MONITORING OF CROP DISEASES AND PESTICIDES INFORMATION THROUGH CROWDSOURCING WITH CROP YIELD PREDICTION"** is a bonafide work of **"M.BHARATHIDASAN, Reg. No. 810015205016 and P.DURAIVEL, Reg. No. 810015205021"** who carried out the project work under my supervision.

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Submitted for the VIVA-VOCE to be held on _____

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DECLARATION

We hereby declare that the work entitled **"REAL TIME MOBILE APPLICATION FOR CLASSIFCATION AND MONITORING OF CROP DISEASES AND PESTICIDES INFORMATION THROUGH CROWDSOURCING WITH CROP YIELD PREDICTION"** is submitted in partial fulfilment of the requirement for the award of the degree in B.Tech. University College of Engineering, BIT Campus, Anna University, Tiruchirappalli, is record of our own work carried out by us during the academic year 2018 – 2019 under the supervision and guidance of **Mr. M. PRASANNA KUMAR,** Teaching Faculty, Department of Computer Science and Engineering, University College of Engineering, BIT Campus, Anna University, Tiruchirappalli. The extent and source of information are derived from the existing literature have been indicated through the dissertation at the appropriate places. The matter embodied in this work is original and has not been submitted for the award of any degree, either in this or any other University.

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ICT – INFORMATION AND COMMUNICATION TECHNOLOGY

PHP – HYPERTEXT PREPROCESSOR / PERSONAL HOME PAGE

REST – REPRESENTATIONAL STATE TRANSFER

HTTP – HYPERTEXT TRANFER PROTOCOL

MLR – MULTIPLE LINEAR REGRESSION

DAC – DEPARTMENT OF AGRICULTURE CORPORATION

ABSTRACT

Agriculture, the backbone of Indian economy, is the cumulative activity of millions of smallholder farmers in India. Agriculture and allied agricultural activities still continues to provide employment to around 65 percent of the total workforce. The correct and timely assessment of problems on the field can improve yields and therefore incomes for the smallest of farmers. Since the introduction of mobile phones, farmers have had access to knowledge at a nominal cost. However, this data is usually in the form of a one-way communication and not always relevant to his situation. The solution envisages using the “wisdom of the crowds”- the creation of a crowd sourced database which is created for the farmers by the farmers. In the ideal situation, farmers will be able to login to see information that other farmers who have planted similar crops and/or farming in similar conditions have inputted. By providing the information about the crop that he has sown like its variety, season, its age and the total area of the field he can then find the 1) Type of disease which has affected or will affect his crop, the solution to overcome the disease; 2) Right pesticide and insecticide to be applied in the right periods and 3) Optimum harvesting period. This information are got by the crowd source. The decision tree algorithm support tool in the software can help farmers to not let the whole field to get damaged from disease but to obtain a good crop yield.