AGRICULTURE FIELD CLASSIFICATION USING MACHINE LEARNING

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

UNIVERSITY COLLEGE OF ENGINEERING

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APRIL 2019

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BONAFIDE CERTIFICATE

Certified that this project report "**AGRICULTURE FIELD CLASSIFICATION USING MACHINE LEARNING"** is the bonafide work of "**ATCHAYA B (810015205013)** and **KAVIYA S (810015205031)"** who carried out the project work under my supervision.

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Submitted for the project Viva voice examination held on ……

Internal Examiner **External Examiner**

DECLARATION

We hereby declare that the work entitled "**AGRICULTURE FIELD CLASSIFICATION USING MACHINE LEARNING**" is submitted in partial fulfillment of the requirement for the award of the degree in B.TECH, in University college of Engineering, BIT Campus, Anna University, Tiruchirappalli. It is the record of our own work carried out during the academic year 2018-2019 under the supervision and guidance of **Dr. D. ASIR ANTONY GNANA SINGH**, Teaching Fellow, Department of Information Technology, University college of Engineering, BIT Campus, Anna University, Tiruchirappalli. The extent and source of information are derived from the existing literature and have been indicated through the dissertation at the appropriate places.

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I certify that the declaration made above by the candidates is true

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ACKNOWLEDGEMENT

We would like to thank our honorable Dean **Dr. T. SENTHIL KUMAR,** professor for having provided us with all required facilities to complete our project without hurdles.

We would like to express our sincere thanks to **Dr. D. VENKATESAN**, Head of the Department of Computer Science and Engineering, for his valuable guidance, suggestions and constant encouragement paved way for the successful completion of this project work.

We would like to thank our project Coordinator **Mr. M. PRASANNA KUMAR** Teaching Fellow, Department of Computer Science for his kind support.

We would like to thank and express our deep sense of gratitude to our project guide **Dr. D. Asir Antony Gnana Singh**, Teaching Fellow, Department of Information Technology, for his valuable guidance throughout the project. We also extend our thanks to all other teaching and non-teaching staff for their encouragement and support.

We thank our beloved parents and friends for their full support in the moral development of this project.

ABSTRACT

Agriculture is the backbone of human sustenance on this world. Now a days with growing population we need the productivity of the agriculture to be increased a lot to meet the demands. Agriculture field classification plays a significant role in improving the productivity of agriculture product. This project present agriculture field classification using machine learning algorithm. The proposed system is developed using two phases namely image feature extraction machine learning (predictive model) model development. In order to extract the feature from the agriculture field images local binary pattern is used. For the construction of predictive model, the decision table algorithm is used. Moreover, the proposed system is tested on a wide range of field images with cross validation method. From the experiment, it is observed that the proposed system produce better accuracy, than the other methods compared.

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LIST OF ABBREVIATION

S.NO	ABBREVIATION	EXPLANATION
1	Random Forest	DECISION TREE
2	NB	NAIVE BAYES
3	TP Rate	TRUE POSITIVE RATE
4	FP Rate	FALSE POSITIVE RATE
5	MCC	MATTHEWS CORRELATION COEFFICIENT
6	ROC	RECEIVER OPERATING SYSTEM
7	PRC	PRECISION RECALL

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