A Mini Project Report on

"PLANT DISEASE DETECTION USING MACHINE LEARNING TECHNIQUES"

Submitted

In partial fulfilment of the requirement for the VI Semester of Bachelor of Technology in Computer Science and Engineering during the academic year 2018-19

Submitted By

HARISH C	R16CS148
ROHITH N S	R16CS520
JEEVAN H C	R16CS169
KAMJULA CHANDRASEKHAR	R16CS177

Under the guidance of

Prof. THANUJA K

School of C & IT

REVA UNIVERSITY

School of Computing and Information Technology

Rukmini Knowledge Park, Katigenahali, Yelahanka,

Bengaluru-560064

2018-2019

REVA UNIVERSITY
Bengaluru, India

SCHOOL COMPUTING AND INFORMATION TECHNOLOGY

CERTIFICATE

This is to certify that the mini project entitled "**PLANT DISEASE DETECTION USING MACHINE LEARNING TECHNIQUES**" is a bona fide work carried out by Kamjula Chandrasekhar, Harish C, Rohith N S, Jeevan H C bearing SRN R16CS177, R16CS148, R16CS520, R16CS169 respectively in partial fulfilment of 6th semester of Computer Science and Engineering program of Bachelor of Technology, REVA University during the academic year 2018-19. It is certified that all the corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the school library. The mini-project report has been approved as it satisfies the academic requirements in respect of mini-project prescribed for the 6th semester of CSE program.

Signature of the Guide

(prof. Thanuja K)

Signature of the Director

(Dr. Sunilkumar S. Manvi)

Signature of External

ACKNOWLEDGEMENT

Any given task achieved is never the result of efforts of a single individual. There are always a bunch of people who play an instrumental role is leading a task to its completion. Our joy at having successfully finished our mini project work would be incomplete without thanking everyone who helped us out along the way. We would like to express our sense of gratitude to our REVA University for providing us the means of attaining our most cherished goal.

We would like to thank our Hon'ble Chancellor, *DR. P. SHYAMA RAJU*, Hon'ble Vice-Chancellor, *DR. S. Y. KULKARNI* for their immense support towards students to showcase innovative ideas.

We cannot express enough thanks to our respected Director, *DR. SUNILKUMAR S. MANVI* for providing us with a highly conducive environment and encouraging the growth and creativity of each and every student. We would also like to offer our sincere gratitude to our Mini Project Coordinators, *DR. BHASKAR REDDY P V, PROF. KIRAN M, PROF. RAGHAVENDRA REDDY*, and *PROF. GEETHA B* for the numerous learning opportunities that have been provided.

We would like to take this opportunity to express our gratitude to our Mini Project Guide, *PROF. THANUJA K* for continuously supporting and guiding us in our every Endeavor as well for taking a keen and active interest in the progress of every phase of our mini project. Thank you for providing us with the necessary inputs and suggestions for advancing with our project work. We deeply appreciate the wise guidance that sir has provided.

Finally, we would like to extend our sincere thanks to all the faculty members, staff from School of Computing and Information Technology.

Kamjula Chandrasekhar

Harish C

Rohith N S

Jeevan H C

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ABSTRACT

Crop diseases serve as a major threat to food supply. As a result of growing of Robotic technology throughout the world, it has now become technical feasible to leverage image processing techniques with deep learning to identify type of plant disease from a sample photo. The mini project aims at building a Robo car type which detects the lettuce plant leaf and leafy vegetable diseases. Using public dataset of 2,000 images of diseased and healthy plants, a pretrained model is implemented to detect the type of disease the plant has and send the same massage to the farm owner. Identifying diseases can lead to quicker interventions that can be implemented to reduce the effect of crop diseases on food supply.