

CROP DISEASE PREDICTION AND MANAGEMENT SYSTEM

A PROJECT REPORT

Submitted by,

SUNKU SAI YASWANTH - 20211ISD0007
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Under the guidance of,

Ms. MONISHA GUPTA

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

INFORMATION SCIENCE AND TECHNOLOGY
(Artificial Intelligence and Data Science)

At



PRESIDENCY UNIVERSITY

BENGALURU

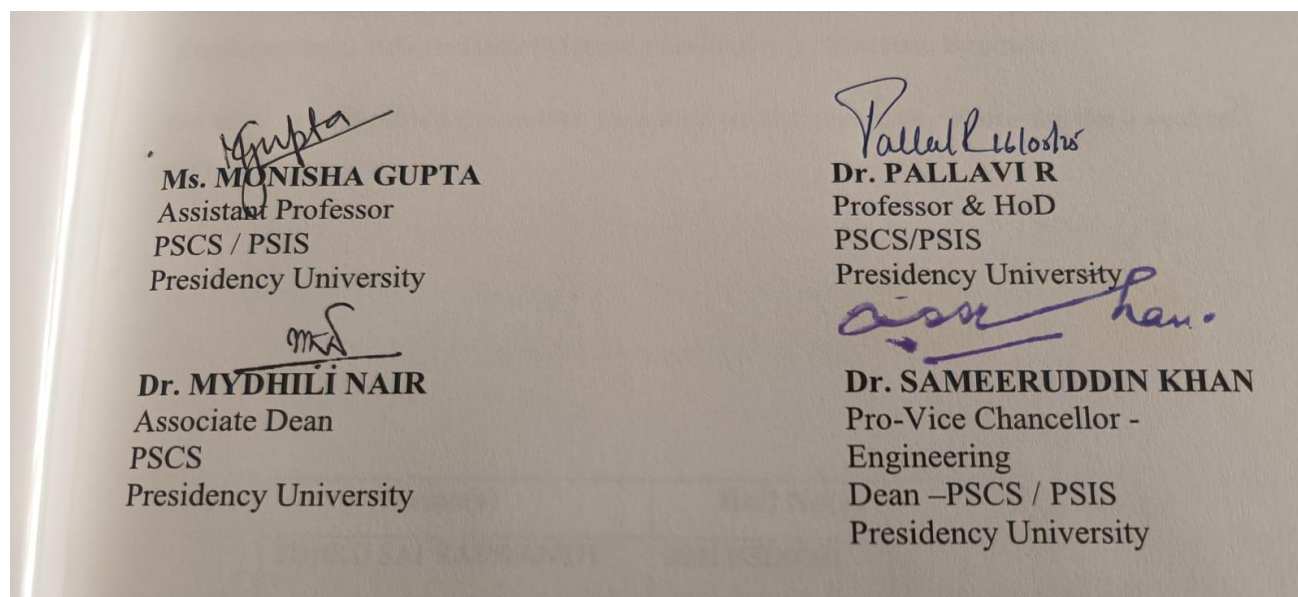
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PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

This is to certify that the Project report “**CROP DISEASE PREDICTION AND MANAGEMENT SYSTEM**” being submitted by “SUNKU SAI YASWANTH, GAJJALA AKHILA” bearing roll number(s) “20211ISD0007, 20211ISD0015” in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in **Information Science and Technology (Artificial Intelligence and Data Science)** is a bonafide work carried out under my supervision.



PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING

DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **CROP DISEASE PREDICTION AND MANAGEMENT SYSTEM** in partial fulfillment for the award of Degree of **Bachelor of Technology in Information Science and Technology**, is a record of our own investigations carried under the guidance of **Ms. MONISHA GUPTA, Assistant Professor, School of Computer Science Engineering & Information Science, Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

Name(s)	Roll No(s)	Signature(s)
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ABSTRACT

As the world grapples with increasing food demands and environmental pressures, the push for smarter, more sustainable farming methods is more urgent than ever. Perfect Crops is a forward-thinking project built around this very idea. It introduces an AI-driven web platform that supports farmers in making well-informed choices when it comes to selecting crops, applying fertilizers, and managing plant health.

Agriculture is still the pillar of human sustenance, yet contemporary farmers are confronted with issues like plant illness, fertilizer misuse, and inappropriateness in crop selection—resulting in poor harvests and financial pressure. To fill the gap between conventional farming practices and new technologies, we introduce a web application-based AI that provides intelligent solutions in plant disease analysis, and fertilization optimization. With the help of sophisticated machine learning algorithms—such as hybrid ensemble learning—and image processing technology, the platform allows for early diagnosis of infection in plants through real-time image processing. Farmers can upload images of their crops directly through an inbuilt camera feature for real-time evaluation and actionable data. The fertilizer advisory module offers fact-based inputs for maximum utilization without causing damage to the environment. Built with Python and latest web technologies, the platform boasts a user-friendly interface along with leveraging Google Search to enable users to search best practices and market trends. The CropCare is smart agri solution is designed to empower farmers—particularly in technology-constrained areas such as rural India—by enhancing decision-making, optimizing yield, minimizing wastage, and teaching sustainable farming practices

ACKNOWLEDGEMENT

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SUNKU SAI YASWANTH
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