



FINAL YEAR PROJECT REPORT

**PLANT DISEASE DETECTION USING
ARTIFICIAL INTELLIGENCE**

**In fulfillment of the requirement
For degree of
BS (COMPUTER SCIENCES)**

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DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

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PLANT DISEASE DETECTION USING ARTIFICIAL INTELLIGENCE

ABSTRACT

Plant diseases have a significant impact on agriculture, resulting in basic output losses. Plant disorder disclosure has benefited from the new extension of substantial learning techniques, which provides a bountiful tool with extremely precise findings. Through significant learning systems, Convolutional Neural Network (CNN) models were created to execute plant diseases revelation and terminate employing direct leaves photographs of sound and unpleasant plants. The models were created using an available informational dataset that included 5 exceptional plants in a variety of 24 indisputable classes of species disorder combinations, including all the healthy plants. To increase the number of images in the collection, two methods were used: Combining traditional extension approaches and cutting-edge generative adversarial networks A couple of model designs were created, with the best one achieving a 95.34 percent success rate in distinguishing the different plant disease blend (or strong plant). The model's commonly excessive fulfilment fee makes it an critical warning or early warning device, as well as a technique that may be extended to enable a planned plant sickness undeniable evidence system perform in certified improvement settings. With the goal of being able to apply certain actions early, fast and exact models for plant disease recognition are required. As a result, the issue of food security becomes less of a concern.

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