

# Crop Disease Detection Using AI for Vietnamese Farmers

Team Turtle

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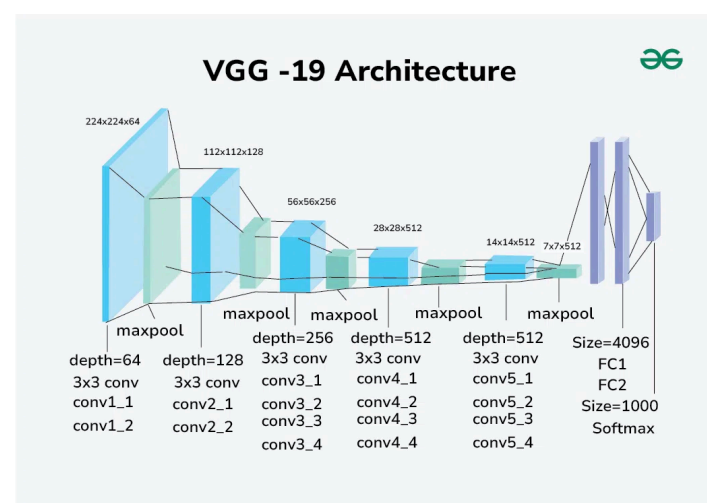
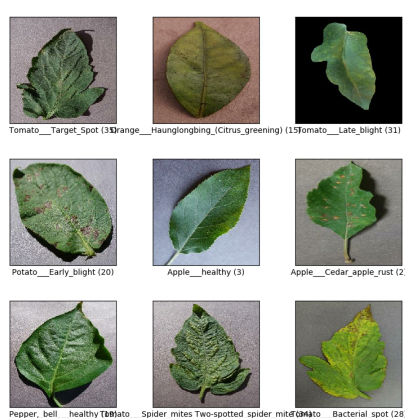
## Problem Statement

Vietnamese farmers lose up to 30% of their crops each year due to diseases, but timely diagnosis is limited by a lack of experts and slow traditional methods. There is a need for a fast, affordable, and easy-to-use tool to help farmers detect crop diseases early. Our project uses AI to automatically detect diseases in common crops in Vietnam.

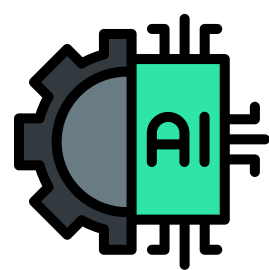
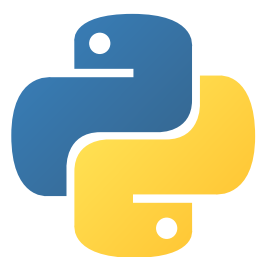
## Objectives

- Develop a disease detection model using CNN
- Design a user-friendly mobile application
- Provide farmers with a simple tool to capture images of crops, receive instant diagnosis

## Technology Stacks



- The dataset PlantVillage with over 20,000 images
- The model is trained using TensorFlow, Keras and Python

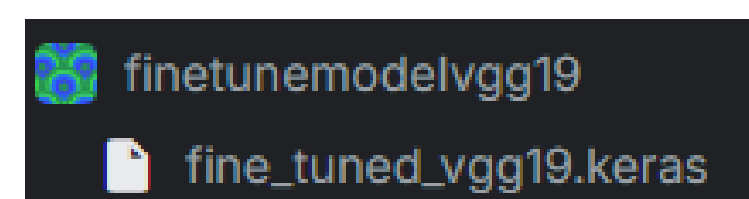


## Solution Overview

Leaf for inspection



Trained model for testing



Healthy



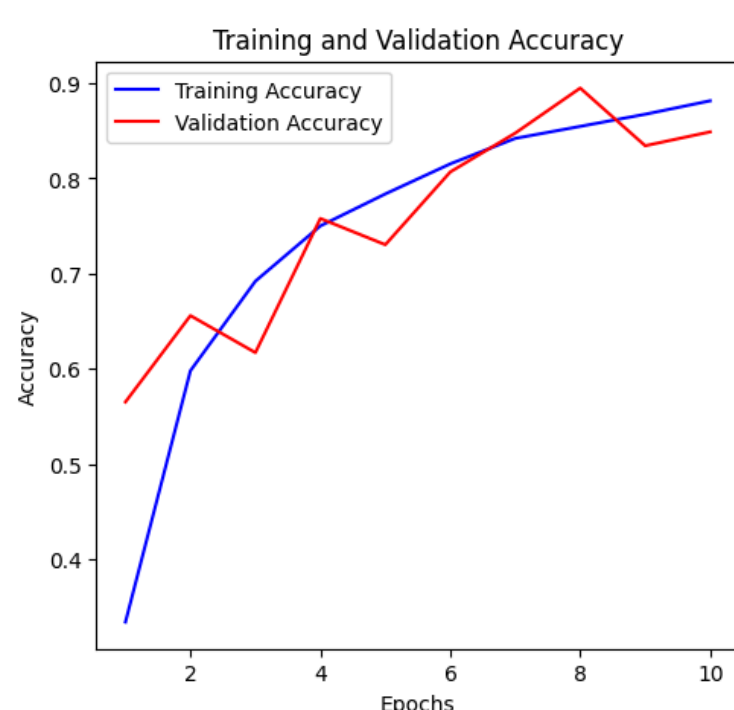
Unhealthy



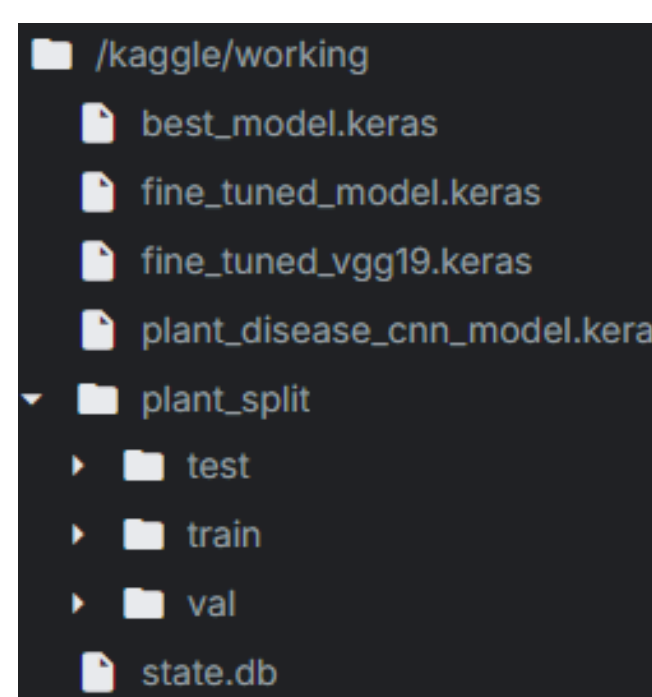
Results

Leaf name and disease analysis

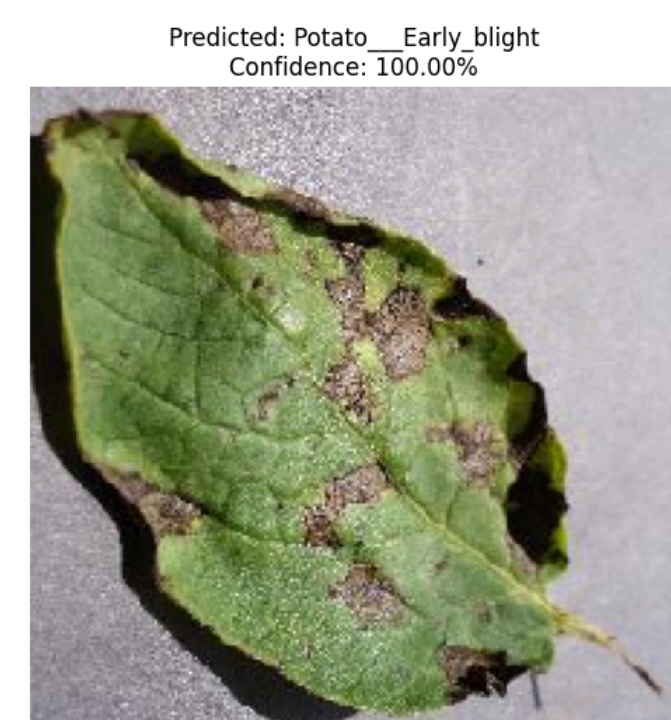
## Results



Accuracy (training vs validation graph)



Trained Model (files and datasets)



Prediction (leaf disease detection result)

