

FERTILIZERS RECOMMENDATION SYSTEM FOR DISEASE PREDICTION

INTRODUCTION

- Detection and recognition of plant diseases using learning are very efficient providing symptoms of identifying diseases at its earliest.
- Plant pathologists can analyze the digital images using digital image processing for diagnosis of plant diseases.
- Application of computer vision and image processing strategies simply assist farmers in all of the regains of agriculture.

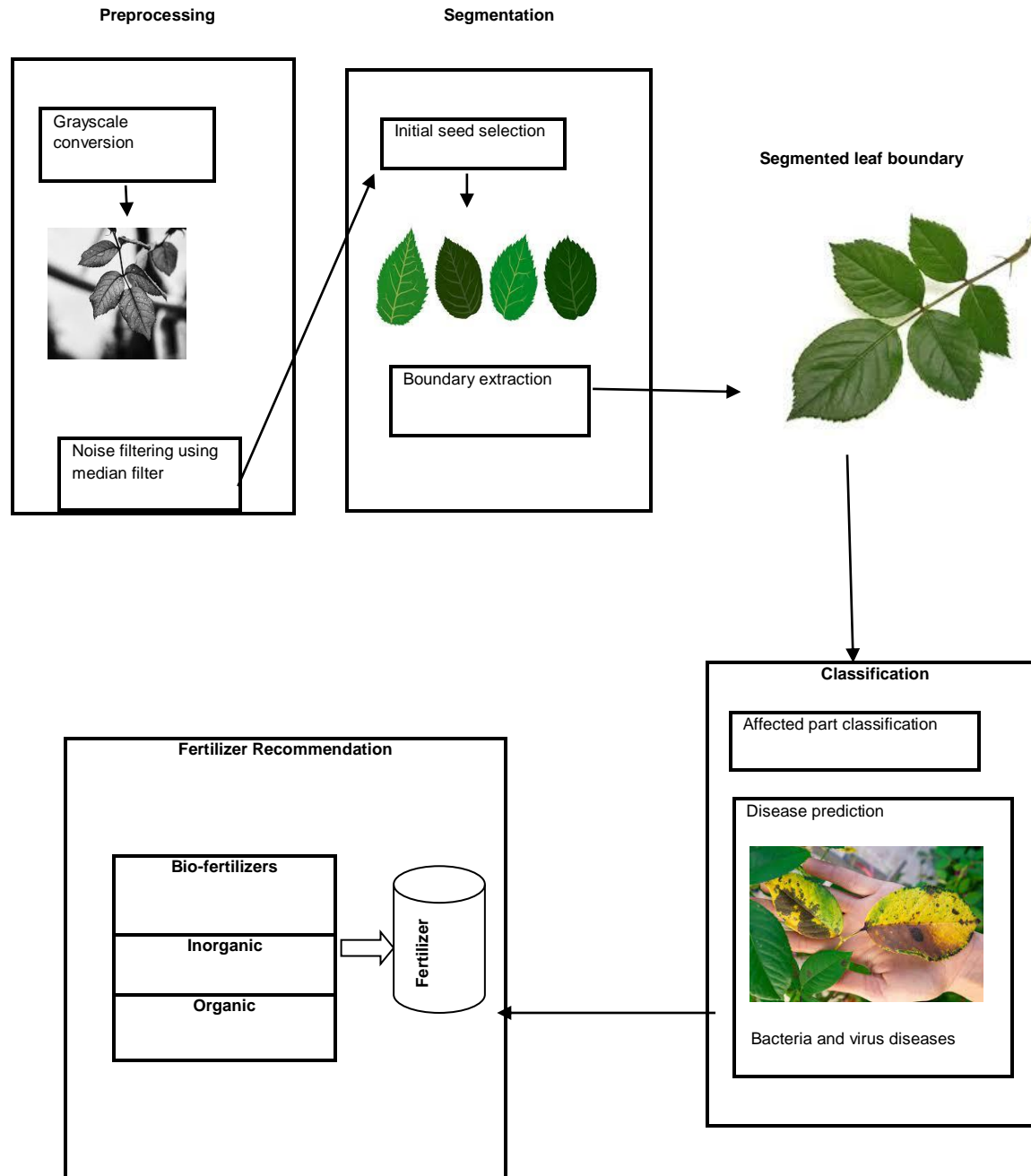
MOTIVATION

- Farming is one of the major sectors that influence a country's economic growth.
- In this project, I present a website in which the following applications are implemented: crop recommendation, fertilizer recommendation and leaf disease prediction respectively.

CLASSIFICATION OF PROPOSE

- ❖ **Acquisition**
 - *To get the image of the leaf so that evaluation in the direction of a class can be accomplished.*
- ❖ **Preprocessing**
 - *The purpose of the image preprocessing is improving image statistic so that undesired distortions are suppressed and image capabilities which are probably relevant for similar processing are emphasized*
- ❖ **Segmentation**
 - *Implements guided active contour method.*
 - *Unconstrained active contours applied to difficult natural image.*
- ❖ **Disease Prediction**
 - *Leaves are affected by bacteria, fungi, virus and insects*
- ❖ **Fertilizer recommendation**
 - *Recommendation the fertilizer for affected leaves based on severity level*

Proposed Architecture



Use case diagram

