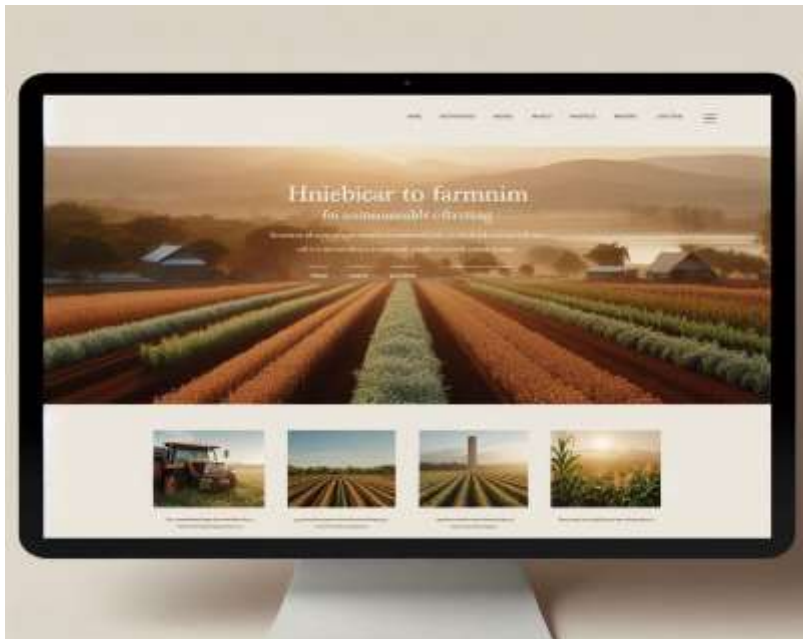




FARMCARE: Farmer's BackBone

Crop Monitoring Using Computer Vision



Team: Sophisticated Ai
Ashok Suthar



Problem Statement

- ❖ A farmer is the Backbone of a country(India) and farmers are going through a crisis due to various reasons.
- ❖ Computer vision is a great way to know more about crops and help farmers technically analyze the field at a low cost
- ❖ A simpler UI and interactive models might save money and the lives of many farmers in India. So, This project is all-rounder support a farmer can ask for.

Lets provide Technical Eyes to Farmers!!





StakeHolders

- ❖ Farmers
- ❖ Botanists
- ❖ Department of Agriculture
- ❖ Researchers/scientist

Statistics

- ❖ Computer vision has been used in agriculture to increase crop yields by 4–6%
- ❖ The global market for computer vision in agriculture is projected to reach several billion dollars by 2025, with a compound annual growth rate (CAGR) exceeding 20%.
- ❖ Accuracy rates for yield estimation using CV algorithms can exceed 90% in some cases.



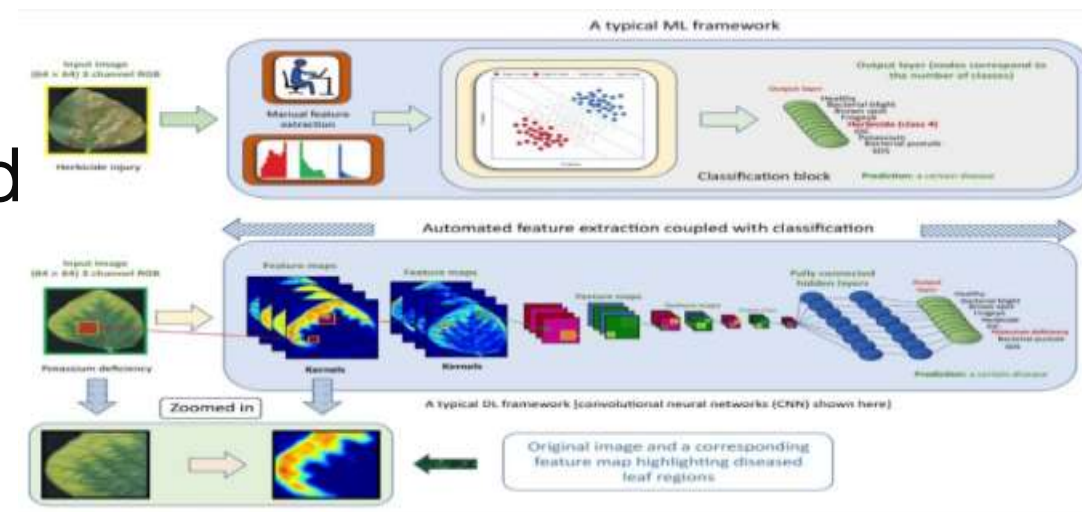
Existing System

- ❖ Weed Detection and Management System
- ❖ Crop Disease Identification and Diagnosis
- ❖ Soil texting using computer vision



LIMITATIONS:

- ❖ Using Technical and heavy word
- ❖ Old Datasets
- ❖ New Research in GenAI



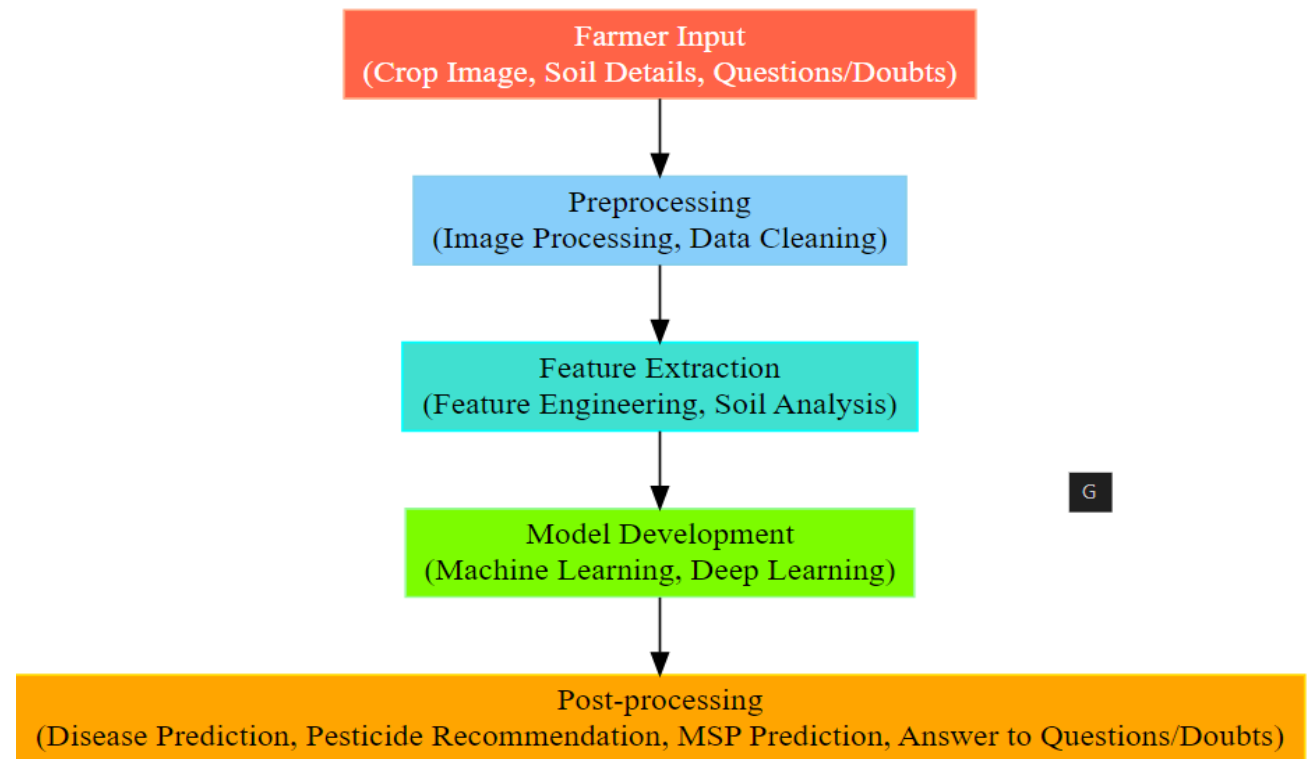


Proposed System

Our Model is a all-rounder farmer's helper using computer vision

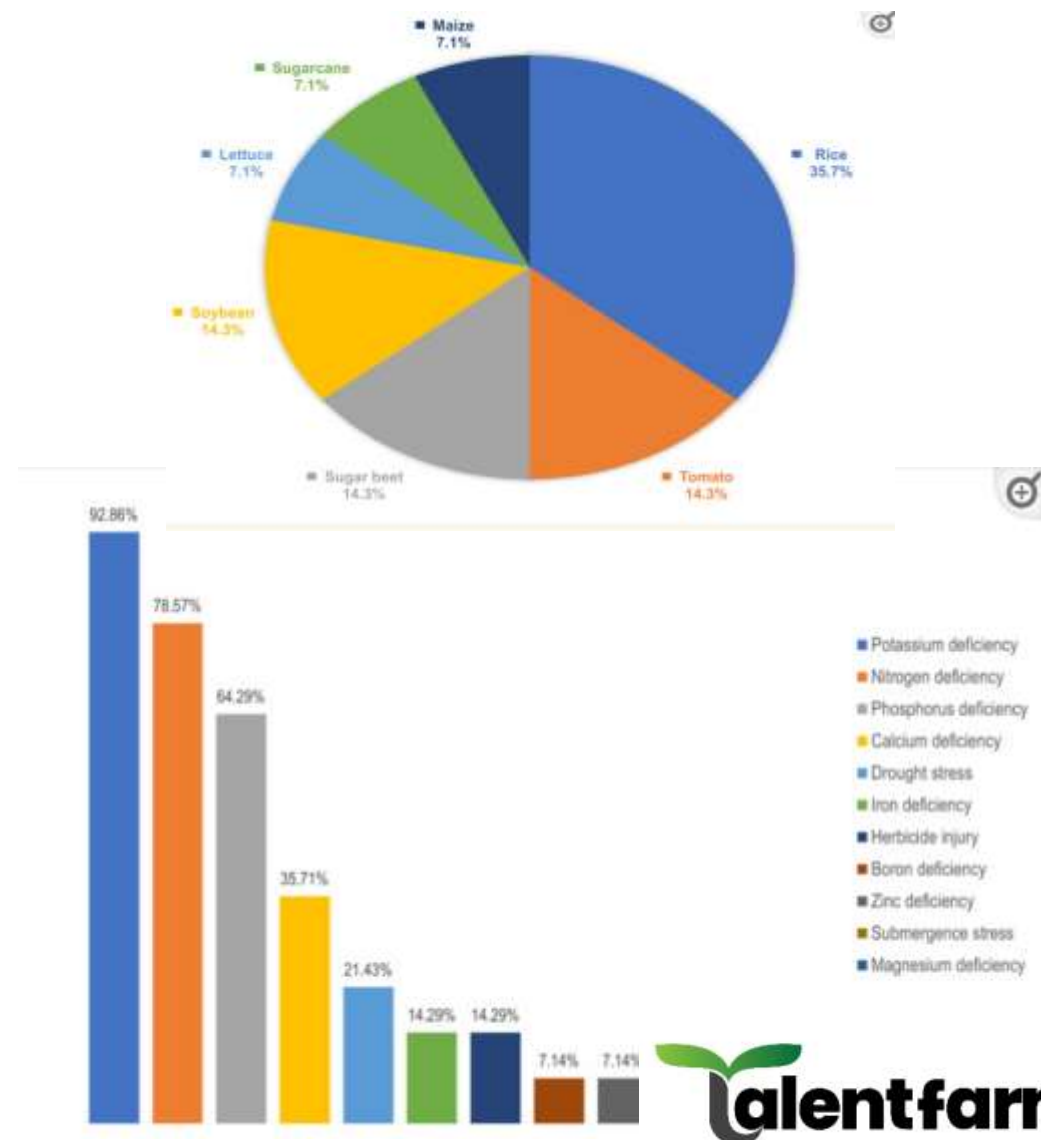
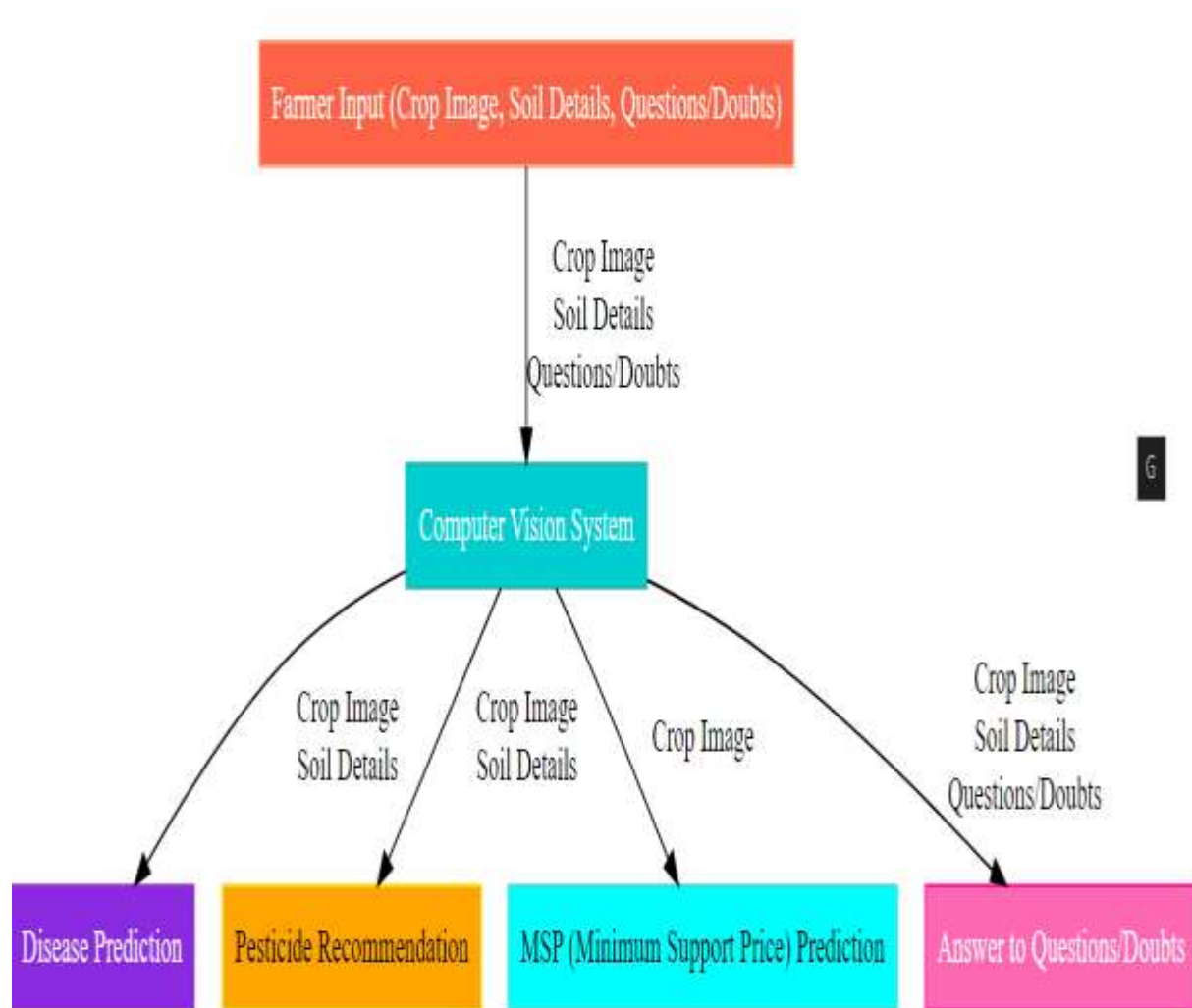
FEATURES:

- ❖ Detecting plant disease
- ❖ Recommend pesticides
- ❖ Soil Analysis and solutions
- ❖ MSP –connecting to buyers
- ❖ Multi-Lingual ChatBot





Architecture /Block Diagram





References

- ❖ Inspiration: <https://github.com/Gladiator07/Harvestify>
- ❖ MSP Dataset: https://data.gov.in/resource/commodity-wise-details-minimum-support-price-msp-mandated-crops-during-2000-01-2017-18-and?as_fid=41dae52b62435359a38574822b144af9f30ef1d0
- ❖ Plant disease dataset: <https://www.kaggle.com/datasets/vipooooool/new-plant-diseases-dataset>
- ❖ Plant recommendation : <https://www.kaggle.com/datasets/atharvaingle/crop-recommendation-dataset>
- ❖ Chatbot : https://www.researchgate.net/publication/366759579_A_Machine_Learning_Based_Mobile_Chatbot_for_Crop_Farmers
- ❖ Inspiration: <https://github.com/Gladiator07/Harvestify>



Thank You!

