



SWOLENTIST CONSULTANTS

PREDICTING PLANT DISEASE

INFORMATION FOR SMALL FARMERS



OVERVIEW

01

Business Problem

02

Data & Model

03

**Results &
Recommendations**

04

Next Steps

BUSINESS PROBLEM

- **Disease**
- **Crop Loss**
- **Small Farms**

WHAT DATA WAS USED?

- PlantVillage Data
- Healthy & Diseased Plant Images of 14 Crops
- 50,000 Images
- 26 Common Diseases

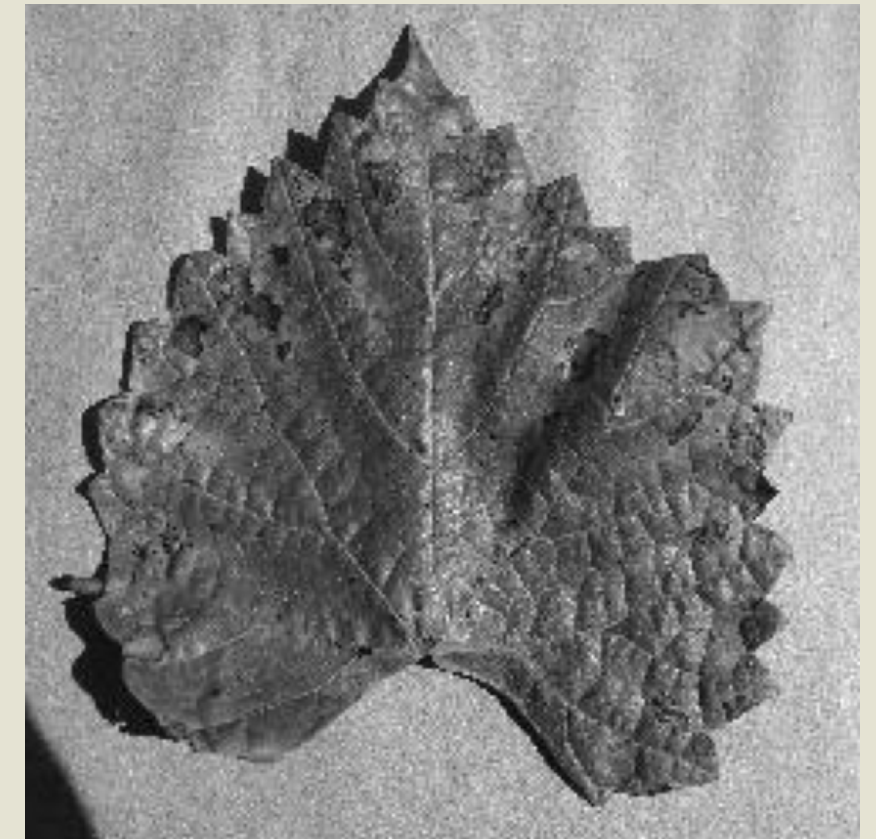
EXPLORING THE DATA

DISEASE

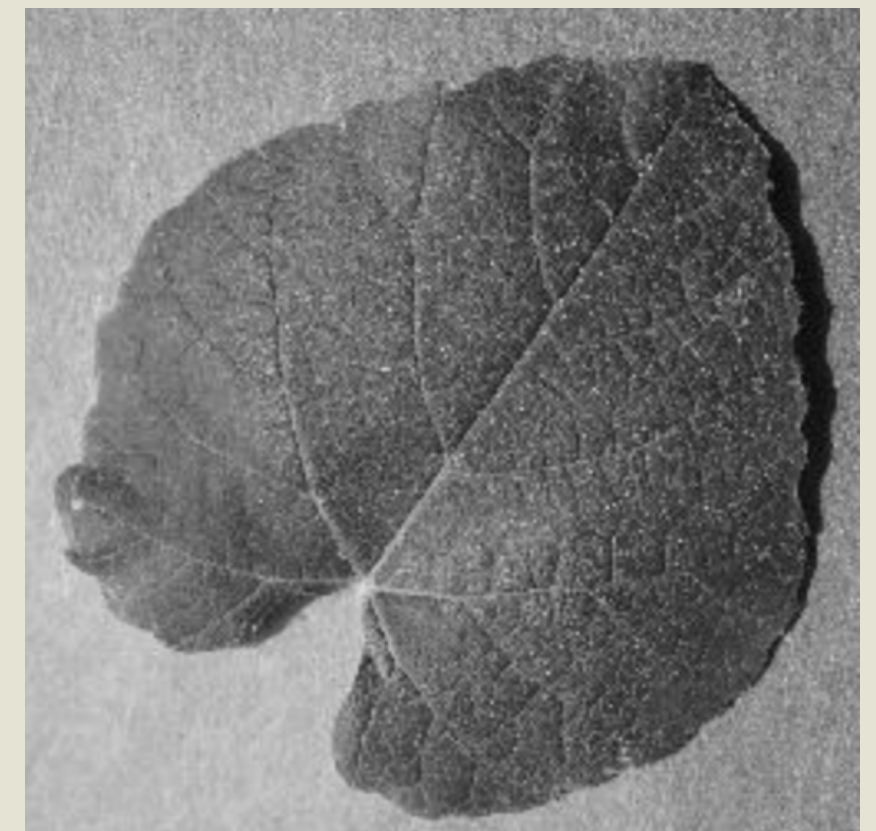
COLOR



GRAYSCALE



HEALTHY



EXPLORING THE DATA

IMAGE COUNTS

HEALTHY



DISEASE



0 25,000 50,000 75,000 100,000 125,000

MODEL RESULTS

Convolution Neural Network

Accuracy: 75%

NEXT STEPS

01
DISEASE
TRACKING SYSTEM

02
PREVENT
CROP LOSS

03
SAVE
SMALL FARMS

FUTURE WORK

The title 'FUTURE WORK' is positioned at the top of the slide. Below it, there are three horizontal bars of different shades of gray: a dark gray bar, a medium gray bar, and a light gray bar, all spanning the width of the slide.

01

DIFFERENT
KINDS OF CROPS

02

CLIMATE
DATA

03

APP
DEPLOYMENT



THANK YOU

JEN SANS

[HTTPS://GITHUB.COM/JENSANS/DETECTING-PLANT-DISEASE](https://github.com/jensans/detecting-plant-disease)