

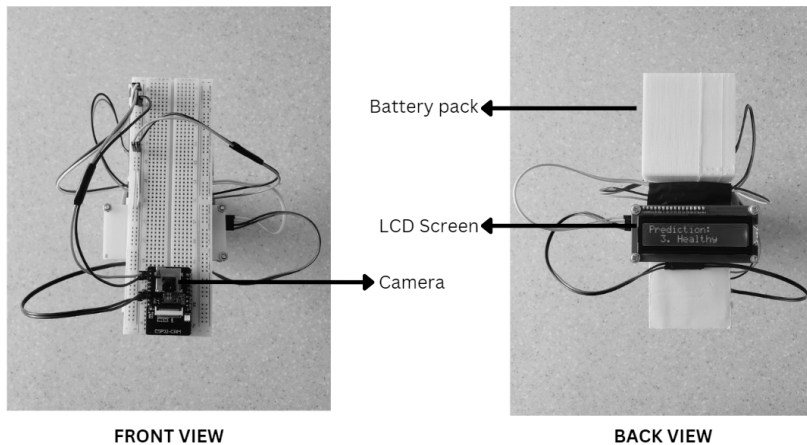
Introduction

This system is part of an undergraduate thesis being conducted by Chinwe Ibegbu, a final-year Computer Science student at Ashesi University. This system is a disease classifier for cassava leaf diseases. With its own power source and on-device inference, you can find out the disease plaguing your crop without a phone, electricity or access to the internet.

What do I need?

To use this device, follow the simple steps in the next section and refer to this document to find out what to do next.

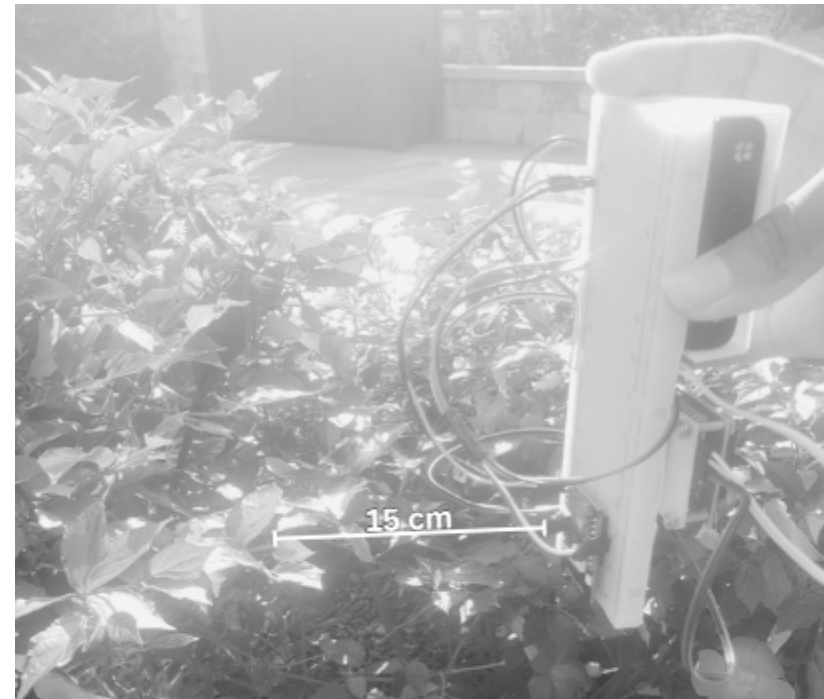
How do I use this device?



STEP 1: Hold the device by the battery pack at the back

STEP 2: Position the camera approximately 15 cm from the plant leaf you want to test

STEP 3: Look at the LCD screen to see your results



What do I do now?

If the screen says:



Your crop has Cassava Brown Streak Disease (CBSD).

How does it spread? CBSD majorly spreads through planting cassava cuttings from infected cassava plants

What do I do?

- Plant clean (symptomless) cassava cuttings
 - Uproot and destroy all infected crops to prevent spreading
 - Sterilise all farm tools over fire before cutting the cassava
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If the screen says:



Your crop has Cassava Mosaic Disease (CMD).

How does it spread? CMD is caused by a virus which can be spread by the whitefly or by infected cassava cuttings

What do I do?

- Uproot, sundry and burn all infected crops to prevent spreading
 - Avoid planting other plants that host the virus next to it e.g. castor bean
 - Intercrop with cereals and legumes to repel whiteflies
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If the screen says:



Your crop is (most likely) healthy!

If the screen says:



Your crop is infected with a disease that is not common to the Akuapim-South Municipal Assembly.

What do I do?

- Get in contact with your local Agricultural Extension Agent (AEA)

How do I get help?

Contact the developer, Chinwe Ibegbu, at 0203505929 or refer to this document.