

# CROP DISEASE-DETECTING APP

BY BILLY RWOTHUNGEYO

Artificial intelligence (AI) is the future of technology. AI applications, such as the ones used in self-driving cars and in playing against humans in chess, are slowly making an entry in Uganda, going by the exploits of innovative Ugandans, like Samuel Kamya.

The young biochemist has developed a mobile app, Eska, which is aimed at helping farmers detect nutrient deficiencies and diseases in crops.

"If your soils lack certain nutrients, these symptoms will show in the crops. Farmers get low yields because of diseases or lack of certain nutrients, such as nitrogen, potassium and magnesium," Kamya explains.

## HOW DOES THE APP WORK?

All one needs to do is download the app on Google Play Store onto a mobile device, move along with the phone to the garden, open the app and scan the affected part on the crop.



Kamya

Using artificial intelligence, the app diagnoses the condition affecting the plant.

"This app has been designed to act as a diagnostic tool. All you have to do is scan the crop when you see

something that you think is amiss," he says.

"After getting such information using the app, you can move on to make interventions. For example, if you find out that the plant does not have calcium, you will see blossom end rot in tomatoes on the app."

Kamya says it will be easier for the farmer to address the disease or deficiency affecting the plant after detecting the problem.

The scientist says he was motivated to develop the app after seeing how farmers make losses in the country.

"Much of our agriculture is done at God's mercy. If you are lucky, diseases do not come and you have rain, you will reap big. If they (diseases) come, you cry," he says.

Kamya is slowly building a reputation as one of the country's most dynamic innovators. He has previously made a cancer drug technology, the membrane coated carbonised pellet (MCCP).