

PlantHealth will be a mobile application (Android and iOS) which is designed to be serve farmers. The main purpose of the application is recognizing the disease of the grape plants. The application will use two features to recognize diseases. First feature takes photo of the any part of the grape plant and gives five possible diseases that the plant could has. Second feature is a chatbot that asks specific questions to user to get more knowledge about the situation of the plant. A user could use just image recognition or just chatbot or both for one query.

First, we will use some image dataset of both healthy and diseased grape plants to train our program so that the application could recognize the diseases and can apart healthy and diseased grape plants. While we are doing this training, we will use Deep Convolutional Neural Networks approaches based on AlexNet or GoogleNet architecture. The training dataset will be found on web, from Ministry of Agriculture and Forestry data and from data of some contacted agricultural engineers.