Crop classification using deep learning

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Abstract

The modern lifestyle has made people less aware of where we get our food from. From a commoner's perspective, it may seem irrelevant but it is our responsibility and is necessary knowledge to know where, when, and how our food is being produced. So, we are designing a web-based application where a user can upload an image to gain insight into the crop.

The workflow is as follows, to decide a few couples of crops whose images are abundantly available, to build a deep learning model, to train the same with the datasets, and to build a user interface. To implement this project, we need to learn the core concepts of deep learning, image processing, and neural networks.

We expect this project to give the users more affinity towards farming and pave a path to bring awareness on agriculture as a profession.

Keywords

Crop identification, Deep learning, Neural network, Image processing