Let's Cook: Click photos and get recipes!

A smart cook book that uses TensorFlow (for Machine Learning) along with React Native

How many times you have all the ingredients in your refrigerator but do not know what to cook? Or you are tired of cooking the same thing over and over again?

Let's cook - will help you get new recipes with ingredients at home.

User guide is as simple as it can get: **Take pictures and get recipes.**

More into the technical side:

The app uses Image Recognition capabilities of Google's Inception and React Native's TensorFlow library to identify ingredients. A feature-rich API(built in NodeJS) provides the recipe given a set of ingredients.

Challenges:

Size of the trained model: Model used by TensorFlow increases in size as it learns new things to classify.

Solution:

Storing the model in a server so that the app size remains compact. But will this solve everything? NO. We still have slow loading times when we download files from server but that is a trade-off that we have to deal with.

Takeaways:

Is Image Recognition really needed to get recipes? NO.

Will a feature like Image Recognition enhance the user experience? A BIG YES!

With the advent of more capable phones and higher network bandwidth, the full potential of technology can be utilized using such apps.

As it is rightly said: **Anything which is made, can be made better!**

Scope of expansion:

Recipe with missing ingredients can be suggested, assuming that the app user plans to go for shopping before cooking.

Similar apps can be designed that utilize the same functionalities.

Example: A story-telling app that narrates a story given a set of characters identified using Image Recognition.

Possibilities are many.