Numan Tok
Shaduan Babbili

Nutrition Detector and Comparator

Our idea of an app capable of detecting nutrition values of different foods based on pictures is a great way to watch your diet, and stay healthy, easily. No more do you need to take a deep dive into the internet to try and find the average nutrition values of what's in front of you, for you to decide whether you should eat it or not.
Our App is a comfortable way to get access to that information fast and reliable. You can simply take a picture of some food and this app will, autonomously, tell you all the information you could possibly want.
Not only that, but you could also take a second picture of different food to compare it with your other potential meal, to see which of those two options is more nutritious and healthier, or more suitable, for you.
This Idea has great potential to get even more developed, so that it can not only show and calculate the differences in these values for you, but also give you information about what each of those different options will result in. For example, that the one option is better if you need more iron-intake or that the other one is better if you need more proteins, maybe to build muscle, or to lose weight.

Why would you want to buy specific hardware to do this job for you, when taking a simple picture with your smartphone could be enough to get what information you want! You won't have to waste your time, trying to eat healthy anymore, you can spend more of your time enjoying what is fun to you and stop stressing over food too much.

But what is it exactly that our app does now?

Our app gets any kind of picture as computer vision and analyzes what exactly it sees on there. For this we use Artificial Intelligence and Machine Learning to identify what kind of foods are on the picture. After that we also analyze the amount/quantity of each of those foods on the picture, to get an idea on how many nutrients are in the meal in general.
Now with that information we can get the average nutrition values of different foods out of a nutrition database and calculate an approximate value for all the different nutrients.

This is the result, you, the user will be able to see, and in case that you want to compare two meals, all we do is calculate the difference from one meal to the other, to show you as a result.

The biggest challenge for this idea, is the question of how exactly we will be able to accurately tell the amount of a specific food in a picture.

For this we could try to take an average and then compare the sizes of the different things contained in the photo to get the approximate size/amount of the actual food in the picture. A specialist for computer vision analysis would be a great help for that.