

## **Project Proposal**

Today, people on Instagram and other forms of social media post pictures of amazing food, which make your mouths water for them. These foods are from different categories and contain different amounts of calories. One thing we all crave is to be able to have these different delicacies for ourselves. But while doing so, we are thinking about whether these foods fit our dietary constraints or meet our calorie consumption limits. We also worry about the fact that we cannot don't know how to make these delicacies.

By providing me with the food image, I plan on giving the food classification, and calorie estimate, and generating a recipe for you. With this information, you will be able to make an informed decision on making the item or not. You will also be able to easily and efficiently replicate the image from Instagram and appeal to the masses!

This can help solve many different problem statements. For example, if one was traveling abroad, they could use this to determine if the item they were having was vegetarian or not. It could also help them catalog the item to make once they are back home. Another example would be if someone was in a restaurant and wanted to know the recipe on how to make a certain dish, they could use this to save the recipe for later. Finally, they could use the application to determine if they were within their calorie consumption limit if they were dieting. The applications of this project can be vast and will provide insightful information, allowing the user to make an informed and thorough decision.

This project is focused on solving three major problem statements- Food classification from the image, recipe generation, and calorie count estimation. I will complete this by using computer vision to model and answer the questions that I have. I will be utilizing many different sources to help improve my model and increase the performance of my model.