#### HARINI G

The recent advances in computer vision and artificial intelligence have changed every aspect of the way people monitor their health and enabled the introduction of many new applications

Image-based
assessment uses
captured images as
the main
source of input for
the analysis.

Active and passive methods can be selected to capture images according to the requirements of the applications.

If the challenges can be resolved, image-based dietary assessment will definitely play an important role in nutritional health monitoring in the near future.

#### KIRTHIKA K

The implementation of image-based dietary assessment techniques is more complicated since it relies heavily on computing algorithms.

In visual object recognition tasks, Convolutional Neural Networks (CNN) have found great success and therefore CNNs are employed for recognizing food items present in an image.

Image based food calorie estimation is crucial to diverse mobile applications for recording everyday meal.

Web based dietary assessment systems that can record real-time images of the meal and analyze it for nutritional can be very handy.

## JEEVITHA GK

To alleviate the shortcomings of these clinical methods, researchers have been trying to come up with improved techniques

The system uses image segmentation on the photo taken from the top and uses contours to isolate various food portions

The system

uses deep learning algorithms, a server with a trained model to recognize food images and estimate its attributes along with ingredients, and a conventional mobile application.

The main approach for calorie estimation in the is to start off by recognizing the food category, followed by food portion size estimation and finally calorie estimation using standard nutritional fact tables.

## KEERTHANA A

The proposed method helps in determining the nutritional content of food automatically by making it feasible for a person to learn about what food might contain and how healthy it might be.

The best ingredient or process technology option can be chosen using suitable automated analytical software with mathematical and statistical techniques.

The image taken by the system will be analyzed by three stages such as segmentation, recognition, and estimation of portion size.

An output of the proposed system is implemented as a mobile app, where the mobile phone takes an image of food, recognizes it and displays the ingredients and attributes automatically.

# GROUP IDEA

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