Literature survey on

AI POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIAST

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Abstract

Food is essential for human life and has been the concern of many healthcare conventions. Nowadays, new dietary assessment and nutrition analysis tools enable more opportunities to help people understand their daily eating habits, exploring nutrition patterns and maintain a healthy diet. Nutritional analysis is the process of determining the nutritional content of food. The main aim of the project is to building a model which is used for classifying the fruit depends on the different characteristics like colour, shape, texture etc. Here the user can capture the images of different fruits and then the image will be sent to the trained model. The model analyses the image and detect the nutrition based on the fruits like (Sugar, Fibre, Protein, Calories, etc.).

Book/Journal	Author's Name	Inference
Artificial Intelligence in Nutrients Science Research: A Review , 2021 Jan 22.	Jarosław Sak and Magdalena Suchodolska	The aim of this article is to analyze the current use of AI in nutrients science research by using Artificial Neural Network which was dominant in the group of research on food composition study and production of nutrients.
Artificial Intelligence Applications In Nutrition And Dietetics	İzzet Ülker and Feride Ayyıldız	The main ideology of this paper is many researches faced difficulties of evaluating the food preferences and dietary intake that is, remembering the frequency or amount of intake in assessment of dietary intake. To overcome this the apps facilitate the work of researchers and provide more reliable results than traditional methods.
Dietary assessment methods in epidemiologic studies, 2014Jul 22.	Jee-Seon Shim, Kyungwon Oh, and Hyeon Chang Kim	This article reviews that each method has inherent strengths and limitations. Continued efforts to improve the accuracy of dietary intake assessment and enhance its feasibility in epidemiological studies.

A New Deep Learning-based Food Recognition System for Dietary Assessment on An Edge Computing Service Infrastructure	Chang Liu, Yu Cao, Guanling Chen, Yunsheng Ma, Songqing Chen	The IOT based dietary assessment imposes several fundamental challenges on algorithm development and system design. They address this issue by developing a novel deep learning-based visual food recognition algorithms to achieve the best-in-class recognition accuracy.
An Artificial Intelligence-Based System for Nutrient Intake Assessment of Hospitalized Patients	Ya Lu, Thomai Stathopoulou, Maria F. Vasiloglou, Stergios Christodoulidis, Beat Blum, Thomas Walser, Vinzenz Meier, Zeno Stanga, Stavroula G. Mougiakakou	This article is more beneficial for the hospitalized patients where the AI based model is accurately estimate nutrient intake, by simply processing RGB depth image pairs captured before and after a meal consumption.