

AI-POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIASTS

Literature Survey

Paper 1:

Title: The Growing influence of Ai-Powered Fitness Applications

Author: Atif.M - 2020)

Description: The physical and fitness objectives of each person vary. As a result, not everyone can benefit from the same fitness routine. These applications may create unique exercise regimens for each user with the use of cutting-edge technologies like AI, ML, and other top technologies. You may exercise anywhere and at any time when you use these fitness apps, which is one of their main benefits. The user only has to submit the necessary information, which includes their physical measurements, level of fitness right now, fitness objectives, and more. You may exercise anywhere and at any time when you use these fitness apps, which is one of their main benefits. Your cell phone and an internet connection are the only necessities. Whether you're travelling for work, a family holiday, or elsewhere.

Paper2:

Title: AI-powered nutrition analyser for fitness enthusiasts

Author: Jaeger S

DESCRIPTION: Food is basic for human life and has been the concern of numerous healthcare traditions. These days unused dietary appraisal and nourishment investigations apparatuses empower more openings to assist individuals get it their day by day eating propensities, investigating sustenance designs and keep up a sound diet. Nutritional examination is the method of determining the dietary substance of nourishment. It may be imperative portion of explanatory chemistry that gives data approximately the chemical composition, preparing, quality control and defilement of nourishment.

Paper 3:

Title: AI-Powered Nutrition Apps That Help Fitness Enthusiasts with Their Calorie Intake

Author: AKSHAYA ASOKAN – 2019

Description: The need for technical solutions to meet this expanding demand is increasing as the globe becomes more health-conscious over time. Numerous firms and websites that target this market have benefited in India from this worldwide trend. These platforms have made use of AI and its different subsets to calculate calorie consumption and provide food suggestions for a balanced diet. The majority of the time, what we observe is that these platforms serve as a data repository, making real-time information available to many clients that operate in this industry in exchange for a set fee. Numerous start-ups in India and other countries have recently started using natural language processing, artificial intelligence, and predictive analytics.

Paper 4:

Title: Explainability for Artificial Intelligence in Fitness: A multidisciplinary perspective.

Author: Amann J., Blasimme A., Vayena E., Frey D., Madai V.I., and Precise Q.C.2020.

Description: When it comes to the use of artificial intelligence (AI) in fitness, explain ability is one of the most hotly contested subjects. Even though AI-driven systems have been demonstrated to do better than humans in several analytical tasks, the inability to explain results in ongoing criticism. It is not only a technology issue; rather, it raises several legal, moral, ethical, and sociological issues that need to be thoroughly investigated.

Paper 5:

Title: The Design and Implementation of an Ingredient-Based Food Calorie Estimation System Using Nutrition Knowledge and Fusion of Brightness and Heat Information

Author: Sumana Bhattacharya – 2018

Description: People in civilised cultures seem to be ignoring the original function of eating, which was to promote health, as a result of which more and more are becoming fat and dying young. Food is baked or burned in a destructive manner for five hours or eight minutes, respectively, in order to measure the calories in order to compute the daily calorie intake. The calories are then assessed by the lowered weight. Users should first think about choosing hardware and software strategies that have previously been demonstrated in our research before applying our suggested strategy in practise, balancing accuracy and processing speed. Currently, consumers frequently consider the calories of food analysed in the harmful manner stated above as a trustworthy benchmark to calculate and collect their daily caloric intake.

PROBLEM STATEMENT

Due to change in food habits people do not get aware of food items. Our project is to get details about food nutrition's, carbohydrate, protein and fat. Nutritional awareness is also related to knowledge of the interrelationships between nutritional matters and human life, which may have an effect on a person's life. The World Health Organisation (WHO) data reveals that more than 60% of world's population is not physically active enough to induce health benefits.