Nutrition Assistant Application

BOOK TITLE   :   An Overview of Mobile Cloud Computing for Pervasive Healthcare

BOOK AUTHOR   :   XIAOLIANG WANG

PUBLICATION YEAR :   May 2019

ABSTRACT   : Mobile devices, along with wearable sensors, allow patients to access healthcare services from anywhere at any time. Mobile cloud computing (MCC) has been recognized as a promising approach to provide pervasive healthcare services to people in their daily life. In this survey, we demonstrate how MCC techniques have been extensively deployed in various healthcare applications and, specifically, describe the general architecture and design considerations one should take into account while designing an MCC for healthcare scenarios. Finally, the security and privacy issues of the MCC in healthcare are also discussed.

EFFICIENCY   : Given a large number of factors that may affect the performance of the MCC and even result in catastrophic consequences in healthcare, this paper presents the state-of-the-art optimization methods on the MCC for meeting the diverse priorities and achieving the optimal trade off among multiple objectives.

BOOK TITLE   :   HEALTH AND FITNESS ASSISTANT

BOOK AUTHOR   :   PROF. POOJA NAGADEV

YEAR OF PUBLICATION :   March 2018

ABSTRACTION   :   Generally, more qualified the Trainer is, the more personal sessions will cost. This paper enables us to understand how the need for the Personal Trainer can be fulfilled in a web app, by using machine learning algorithms. This app will be able to learn about your diet and customize a diet plan according to type of workout selected. Each plan will bring you closer to the body and healthy lifestyle the user want.

EFFICIENCY   : The goal of this system is to provide a personal trainer which suggests a diet plan and workout plan for a particular type of training that is selected. The personal trainer has the ability to take the workouts to another level irrespective of the ability to remain motivated. When humans are been watched, humans have the tendency to pull, push and act amongst themselves in a better way. These workouts, exercises and training would always be at a greater level, accurate and proper, if that person training them is a professional in fitness and diet. This professional knows the correct exercises and their techniques. Health and Fitness Assistant (HFA) is a simple to use, user friendly, free web app.

BOOK TITLE : A DIET CONTROL AND FITNESS ASSISTANT APPLICATION USING DEEP LEARNING-BASED IMAGE CLASSIFICATION

BOOK AUTHOR : TIANREN DONG

PUBLICATION OF YEAR : October 2019

ABSTRACT : With more and more attentions paid on health, people begin to care about healthy diet options created by experts on nutrition. However, it will take a long time to observe the effects by taking healthy diet. This causes great difficulty for users to follow the healthy diet strictly. Most existing applications are not user-friendly in inputting information to the application. Then it becomes difficulty to track for exact health status. This paper proposes an android application which can be trained to recognize different kinds of food and facilitate the information input through phone camera using machine learning algorithms. Thus, nutritional information can be fed in application accurately.

EFFICIENCY : The system uses Tensor Flow to train food images. Tensor Flow is a multipurpose machine learning framework. On the other hand, a mobile application has been developed using Android Studio, which integrates the trained deep learning model and makes predictions to classify the food photos. In addition, the mobile application allows users to log the food and calories and be able to see the history of the food, which is an essential component to keep users engaged and motivated.

BOOK TITLE : Mobile cloud based system recognizing nutrition and freshness of food image

BOOK AUTHOR : DIPTEE KUMBHAR

PUBLICATION YEAR : August 2017

ABSTRACT : As people across the globe are becoming more interested in watching their weight; eating healthier and avoiding obesity, a system that can measure calories and nutrition in every day meals can be very useful. As well as mobile-based applications have become ubiquitous in numerous aspects of people's live. In this paper, we propose a mobile cloud based food calorie measurement framework.

EFFICIENCY : Our framework provides clients with advantageous and intelligent mechanisms that permit them to track their food intake and monitor their calorie count. The food recognition technique in our system uses Naïve Bayes training mechanism in a cloud computing environment with classifier machine learning. This system improves the accuracy of calories consumption measurement process.