IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 1, March 2024

# Automated Food Recognition for Nutritional Analysis in Dietary Evaluation

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**Abstract:** *In today's world, computer vision has made remarkable strides, especially in the realm of recognizing food images. Deep neural networks (DNN) have become a standout choice among various machine learning algorithms for their effectiveness in precisely identifying different food items captured in images. Despite the widespread adoption of DNN-based classification algorithms for food recognition, there are persistent challenges in accurately pinpointing foods due to variations in size, shape, and other defining characteristics. This paper aims to provide a brief overview of how deep learning (DL) is leveraged in food recognition and explores its wide-ranging applications. Additionally, it delves into the utilization of machine learning (ML) to construct a robust model for identifying food in images, using the Fruits and Vegetables Image Recognition Dataset. The results highlight a significant improvement in the accuracy of the proposed model, showcasing an impressive increase of around 95%.*

**Keywords:** Machine Learning, Deep Neural Network, Deep Learning, Computer vision.

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