

Intelligent Food Recommendation System Using Machine Learning

*Ivet M. Guillén¹, Hugo C. Córdova²

¹Department of Computer Applications, Higher Teacher Training College, Bambili, Cameroon

²Department of Smart Intelligent Systems and Tools, Higher Teacher Training College, Bambili, Cameroon

Abstract

The buying behavior of the consumer is affected by the suggestions given to the items. Recommendations can be made in the form of a review or ranking given to a specific product. Calories consumed by people contain carbohydrates, fats, proteins, minerals and vitamins, and any malnutrition causes severe health problems. In this paper, we propose a recommendation system which is trained on the basis of the recommendations received by the customer who has already used the product. Software recommends the product to the customer on the basis of the experience of the consumer using the same product. Each person has his or her own eating patterns, based on the preferences and dislikes of the user, indicating that personalized diet is important to sustain the success and health of the user. The proposed recommendation method uses a deep learning algorithm and a genetic algorithm to provide the best possible advice.

Keywords: Deep learning algorithm, Genetic algorithm, Optimized Nutrition, Recommendation system, RESTful web services, TESCO database, Web crawler

The full length article is available upon request from the editorial office

*Corresponding author

DOI [10.5281/zenodo.7936583#10](https://doi.org/10.5281/zenodo.7936583#10)

