Optimizing the Redistribution of Edible Food through Machine Learning

Vinay P[1] and Saumya Y M[2]
Department of Computer Science and Engineering[1,2]
Canara Engineering College, Bantwal, Mangaluru, India[1]
St. Joseph Engineering College, Mangaluru, India[2]
mail2vinay.17@gmail.com and saumya2087@gmail.com

Abstract: *This paper introduces an online application designed to help bridge the gap that exists between donors and individuals in need, like orphans and NGO's. The three primary parts of the application are food management for events, subscription choices for supporters, and surplus food control for contributors. This paper mainly focuses on the efficiency of food contributions by evaluating food quality and predicting spoilage using the Random Forest algorithm in machine learning. This algorithm has gained 97% accuracy while comparing with other algorithms such as KNN and SVM. Within a predetermined radius, donors and recipients are seamlessly connected, with recipients communicating via the app. A large database records past contributions and notifies people to upcoming events. Ratings and feedback systems ensure that donors have a good experience, which promotes philanthropy and a sense of community that benefits society.*

Keywords: Random Forest Algorithm, Food remain, Donors, Web Application, Food Quality Management