

Informatics Institute of Technology

In Collaboration with

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**Predict ME – A System to Minimize Food Wastage in Fast Food
Restaurants**

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Abstract

Food is getting wasted from due to overproduction fast food restaurants all over the world. In a developing country like Sri Lanka it is higher due to lack of technology in the restaurant domain. Best way to overcome this problem is to notify restaurant managers on quantities and items to produce. Existing solutions are mainly focused on customer satisfaction and fewer solutions were focused on minimizing food wastage due to overproduction. There were no forecasting solutions in Sri Lanka to overcome this problem. Therefore, the aim of this project was to research and implement a system which will help restaurant managers to get insights about the amount of food items that has to be produced in order to minimize food overproduction in their restaurants. To accomplish this aim, datasets were collected from 3 different branches in a same restaurant to train the model. Weka forecasting is used and to model it SMOreg regression algorithm in Weka was used. Overall Accuracy of 83.39% was able to achieve with this system.

Keywords:

Time series forecasting, supervised learning, regression algorithms, food wastage, fast food restaurants