

IoT Based Classification and Price Prediction of Organically and Inorganically Grown Vegetables and Fruits

Wijekoon W.M.G.S
Department of Information
Technology
Sri Lanka Institute of Information
Technology
Malabe, Sri Lanka
it18130812@my.sliit.lk
0000-0003-4474-7635

Wijewardana Lakshan W.M
Department of Information
Technology
Sri Lanka Institute of Information
Technology
Malabe, Sri Lanka
it18132588@my.sliit.lk
0000-0002-3749-8530

Wattegedara S.L
Department of Information
Technology
Sri Lanka Institute of Information
Technology
Malabe, Sri Lanka
it18135862@my.sliit.lk
0000-0002-4282-5102

Kumara W.A.L.S
Department of Information
Technology
Sri Lanka Institute of Information
Technology
Malabe, Sri Lanka
it18130362@my.sliit.lk
0000-0002-0548-7108

Wellalage Sasini
Department of Computer Systems
Engineering
Sri Lanka Institute of Information
Technology
Malabe, Sri Lanka
sasini.w@sliit.lk
0000-0002-2918-2878

Pradeep K.W. Abeygunawardhana
Department of Computer Systems
Engineering
Sri Lanka Institute of Information
Technology
Malabe, Sri Lanka
pradeep.a@sliit.lk
0000-0001-9461-5433

Abstract—Food plays a vital role in human life and, foods also play an essential role in promoting health and disease prevention. Especially fruits and vegetables are considered as one of the primary sources of vitamins and minerals. Therefore, humans are given more priority to consume vegetables and fruits. However, in modern days vegetables and fruits are grown both inorganically and organically. Inorganically grown vegetables are less nutritious and also harmful for the health. Therefore, it is not easy to find quality vegetables and fruits in the market at a reasonable price. The proposed solution is to develop a system to classify the vegetables and fruits, check the freshness and the quality, and predict appropriate prices based on food quality. Here mentioned how the Linear Regression, Ridge Regression, and MLP perception models act when predicting prices. Prices are predicted based on food quality grades.

Keywords—Regression, neural networks, L2 regression, linear regression, Ridge, convolution neural networks, classifier