Market based Ecom to increase profit with Deep Learning on Neural Networks

Abstract:

Mining high beneficial item sets from a transactional database means to identify the item sets with high utility as profits. Although several Algorithms have been invented but there is a problem as it generates large set of candidate Item sets for High Beneficial Item sets also require large number of times scan the database. The unit profits and purchased quantities of the items are not taken into considerations in frequent item set mining and weighted mining only weight is to be considered but not consider the profit. Large number of Item sets decreases the performance of mining with respect to execution time and space requirement. This situation may worse when database contains many Transactions.

With the help of Deep Learning on Neural Networks, candidate item sets generated with only two scans of the database. Proposed algorithms not only reduce a number of candidate item sets but also work efficiently when database has lots of long transactions. This work will be finding the highest sales of the products in the online web ecom applications. It helps to find the combination of products sold in the online sales web sites. It helps the organization to find out the customer requirements in the market and to further improve the higher sold-out products in the websites.

The existing methods of the finding the top profit selling items in the market is very difficult. The accuracy levels of the identification of the products are also not good. The deep learning on neural network will provide the better solution to solve the problem of identification of the profit selling products in the real-world

data. The Convolutional Neural Network algorithm will check the data in more compact with training and testing the data. It will provide more accuracy as compared with the other types of techniques. The online ecommerce dataset will be taken as the input to the application and the dataset will be passed into the Convolutional Neural Network algorithm and the data will be analyzed with different visual graphs. The top 10 profit products will be getting the results which will be useful from the client point of view in monitoring the product which provides the highest profit. The top finding value also can be increased based on the situation which makes the accuracy level higher.

Project Execution plan:

The objective of market based Ecom analysis with Deep Learning on Neural Networks is to detect the find out the highly sold product in the market. In this work, the dataset containing the online sales will be taken into consideration. The pre-processing will be applied into the dataset and the noisy and null value data will be removed from the dataset. After that the data will be analyzed and visualized for further processing. The Convolutional Neural Networks algorithm will be chosen to make the market-based prediction of highest sales of group of products.

Contribution:

The market based Ecom analysis with Convolutional Neural Networks algorithm will be the python-based application which contributes to find out the highest sales of product. It will be helpful in all the ecom online sales web applications to find out the highest sales of the products.

Evaluation:

The application will be developed with Google Colab Python Tool as the project can be directly executed in any type of computer system with internet connection. There is no need for any specific software to be installed in the user system. The Colab Tool helps to develop and run the application directly inside the cloud server where the Python library files are installed.

ALGORITHM:

CONVOLUTIONAL NEURAL NETWORKS ALGORITHM

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