Smart Fashion Recommender Application

KLN COLLEGE OF ENGINEERING

Koushikha MSR, Deepika M, Gokula priya B, Indhuja CR, Abinaya V

CASE STUDY I

TITLE: Predicting Customer Lifetime Value with AIP Platform on cloud based ecommerce website or web application

AUTHOR: Ziv Pollak:2021

PROJECT DESCRIPTION

Predicting customer future purchases and lifetime value is a key metrics for managing marketing campaigns and optimizing marketing spend. This task is specifically challenging when the relationships between the customer and the firm are of a noncontractual nature and therefore the future purchases need to be predicted based mostly on historical purchases. This work compares two approaches to predict customer future purchases, first using a “buytill-you-die” statistical model to predict customer behavior and later using a neural network on the same dataset and comparing the results. This comparison will lead to both quantitative and qualitative analysis of those two methods as well as recommendation on how to proceed in different cases and opportunities for future research.

CASE STUDY II

TITLE: A Systematic Study on the Recommender Systems in the E-Commerce

AUTHOR: Pegah Malekpour Alamdari, N. J. Navimipour, M. Hosseinzadeh: 2020

PROJECT DESCRIPTION

Electronic commerce or e-commerce includes the service and good exchange through electronic support like the Internet. It plays a crucial role in today's business and users' experience. Also, e-commerce platforms produce a vast amount of information. So, Recommender Systems (RSs) are a solution to overcome the information overload problem. They provide personalized recommendations to improve user satisfaction. The present article illustrates a comprehensive and Systematic Literature Review (SLR) regarding the papers published in the field of e-commerce recommender systems. We reviewed the selected papers to identify the gaps and significant issues of the RSs' traditional methods, which guide the researchers to do future work. So, we provided the traditional techniques, challenges, and open issues concerning traditional methods of the field of review based on the selected papers. This review includes five categories of the RSs' algorithms, including Content-Based Filtering (CBF), Collaborative Filtering (CF), Demographic-Based Filtering (DBF), hybrid filtering, and Knowledge-Based Filtering (KBF).

CASE STUDY III

TITLE: Building an e-commerce recommendation system by using Big Query Machine Learning

AUTHOR: Farah Tawfiq Abdul Hussien , Abdul Monem S. Rahma :2021

PROJECT DESCRIPTION

The technological development in the devices and services provided via the Internet and the availability of modern devices and their advanced applications, for most people, have led to an increase in the expansion and a trend towards electronic commerce. The large number and variety of goods offered on e-commerce websites sometimes make the customers feel overwhelmed and sometimes make it difficult to find the right product. These factors increase the amount of competition between global commercial sites, which increases the need to work efficiently to increase financial profits. The recommendation systems aim to improve the e-commerce systems performance by facilitating the customers to find the appropriate products according to their preferences. There are lots of recommendation system algorithms that are implemented for this purpose. However, most of these algorithms suffer from several problems, including: cold start, sparsity of user-item matrix, scalability, and changes in user interest. This paper aims to develop a recommendation system to solve the problems mentioned before and to achieve high realistic prediction results this is done by building the system based on the customers' behavior and cooperating with the statistical analysis to support decision making, to be employed on an e-commerce site and increasing its performance. The project contribution can be shown by the experimental results using precision, recall, F-function, mean absolute error (MAE), and root mean square error (RMSE) metrics, which are used to evaluate system performance.