SMART FASHION RECOMMENDER APPLICATION

LITERATURE SURVEY

UNDER THE GUIDANCE OF

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1. **Paper Title:** Building an e-commerce recommendation system by using Big Query Machine Learning

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

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.

2. **Paper Title:** A Review on Clothes Matching and Recommendation System Based on User Attributes

AUTHOR : Atharv Pandit , Kunal Goel , Manav Jain , Neha Katre

PROJECT DESCRIPTION: It's crucial to dress adequately while venturing out into the real world. The confidence of the individual is raised and a very positive impression is made when they are dressed appropriately in clothing that exhibits some degree of style and is worn in a way that complies with societal norms. The goal of the study is to make it easier for customers to locate the best-fitting outfits by taking into account fine elements like style, patterns, colours, and textures, as well as user characteristics like age, skin tone, and favourite colours. It seeks to assist the user in organising their closet and making stylish clothing selections. It makes an effort to assist the user in dressing appropriately for the occasion and in finding clothing that complements their personal style. In order to create a robust system that discovers the user's matching outfits and provides recommendations, an in-depth analysis of numerous systems that are built for various aspects is undertaken in this research. Systems created to propose clothing using various methodologies have been researched, with both

their benefits and drawbacks highlighted. It has also been investigated how to make clothing detecting systems user-friendly while accepting feedback from the user.

3. **Paper Title:** Fashion Recommendation Systems
   AUTHOR : Samit Chakraborty , Md. Saiful Hoque, Naimur Rahman Jeem, Manik Chandra Biswas.

PROJECT DESCRIPTION: Fast fashion has grown significantly over the past few years, which has had a significant impact on the textile and fashion industries. An effective recommendation system is needed in e-commerce platforms where there are many options available to sort, order, and effectively communicate to user's pertinent product content or information. Fast fashion retailers have paid a lot of attention to image-based fashion recommendation systems (FRSs), which offer customers a customised purchasing experience. There aren't many academic studies on this subject, despite its enormous potential. The studies that are now accessible do not conduct a thorough analysis of fashion recommendation systems and the accompanying filtering methods. This review also looks at many potential models that might be used to create future fashion suggestion systems

4. **Paper Title:** Predicting Customer Lifetime Value with AIP Platform on cloud based ecommerce website or web application

   AUTHOR: Ziv Pollak

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.

5. **Paper Title:** Image-based fashion recommender system.

   AUTHOR : Shaghayegh Shirkhani.

PROJECT DESCRIPTION: Collaborative filtering, the iterative filtering process, matrix factorization, and content-based systems. Systems for collaborative filtering make product recommendations based on user similarity metrics and/or by grouping things from similar users' purchases. Despite the variety of collaborative filtering methods, many widely used systems can be distilled down to just two steps: 1. Seek out users who have similar rating tendencies to the active user (the user whom the prediction is for). 2. To establish a

prediction for the active user, utilise the ratings from the users who shared your interests in step one.

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