LITERATURE SURVEY

Smart Fashion recommender application

Date	20 October 2022
Team ID	PNT2022TMID43960
Project Name	Smart Fashion Recommender Application
Maximum Marks	4 Marks

1. Paper Title: A COMPREHENSIVE REVIEW ON ONLINE FASHION RECOMMENDATION

Publication: December 2020 Author name: Samit Chakraborty

Methodology: Auto Regression (AR) and Linear Regression Model.

Auto Regression (AR) and Linear Regression Model

Using photos pulled from social media, online fashion magazines, well-known e-commerce sites, fashion site blogs, and discussion forums, (Ngai et al., 2018) employed the autoregressive (AR) model (or ARMAX) to forecast style or trends. Due to the data patterns being obtained over a set amount of time, it makes precise trend prediction possible (Fung, Wong, Ho, & Mignolet, 2003). These forecasting models' detailed theoretical contents were demonstrated in two separate studies by Liu et al. (2013) and Nenni, Giustiniano, & Pirolo (2013), which also included several general approach forms. Because they were straightforward, quick, wellinformed, and simple to understand, statistical techniques including auto-regression, exponential smoothing, ARIMA, and SARIMA were frequently employed to assess the sales of clothing. A technique for forecasting retail products was proposed by Demerit (2018). weekly using linear regression models in multi-processing groups with both positive and negative commodities. The introduction of dynamic pricing models to support markdown choices in multi-item group predictions has since followed. In order to prevent overfitting, grouping items in predictive models can be seen as a way of variable selection. They then exhibited regression results from multiple-item groupings on the real-world dataset provided by a clothing company in addition to the findings from the single-item regression model. They also revealed the results of markdown optimization for single items and groups of multiple items that serve as the foundation for multi-item forecasting models. The results suggested that regression models provide better estimates in many categories than the one-item model.

2. Paper Title: Image-based fashion recommender system.

Publication: Year (2021).

Author name: Shaghayegh Shirkhani.

Methodology: 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.

3. Paper Title: Fashion Recommendation Systems

Author name: Samit Chakraborty, Md. Saiful Hoque, Naimur Rahman Jeem, Manik Chandra Biswas, Deepayan Bardhan and Edger Lobaton.

Methodology: 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:** A Review on Clothes Matching and Recommendation System Based on User

Attributes

Author name: Athary Pandit, Kunal Goel, Manay Jain, Neha Katre

Methodology: 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.

5. **Paper Title:** Individualized fashion recommender system

Year: 10 October 2020

Author name: M Sridevi, N ManikyaArun, MSheshikala and E Sudarshan

Methodology: This design seeks to use an image of a product provided by the stoner as

input to prompt recommendations because people frequently see things that they're

interested in and tend to look for products that are similar to those. We reuse the Deep

Fashion Dataset (DFD) photos using neural networks, and we generate the final suggestions

using a closest neighbour backed recommender.