LITRATURE SURVEY

SMART FASHION RECOMMENDATION APPLICATION

Abstract

The textile and apparel industries have grown tremendously over the last year. customers no longer have to visit many stores, stand in long queues or try on garments in dressing rooms as millions of products are now available in online catalogs. the goal of this survey is to provide a review of recommender systems that operate in the specific vertical domain of garments and fashion products.css concepts: information system-recommender systems; multimedia and multi model retrieval; human centered computing-user models additional key words and phrases; fashion recommender systems ,visual, textile, size recommendation.

NTRODUCTION:

Recommender systems help users navigate large collection of products to find items relevant to them inters leveraging large amounts of product information and user signals like products views, followed or ignored items, purchase or web page visits to determine how ,when and what to recommend to their customers. recommender’s system has grown to be an essential part of all large internets retailers driving up to 35% of amazon sales

SEARCH STRATEGY FOR REVELANT PAPERS:

post processing and filter the final list. The total number of articles analyzed exceeds 50,with the majority of recognized research papers an indication of the topic's

originality and freshers

Paper 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.

PAPER 2

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.

PAPER 3:

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

Author name: Atharv Pandit , Kunal Goel , Manav 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.

PAPER 4:

Paper title: review of modern fashion recommendation system.

Author name: Yashar Deldjoo, Fatemeh Nazary, Julian Mcauley, Tommaso Di Noia, Giovanni Pellegrini

MAJOR CHALLENGES:

1)fashion item representation

2)fashion item compatibility

3)personalization and fit

4)interpretability and explanation

5)discovering trends

CATEGORATION OF FASHION RECOMMENDER SYSTEMS:

categorization based on task:

* + - 1. fashion item recommendation
      2. fashion pair and outfit recommendation
      3. size recommendation
      4. explanation for fashion recommendation
      5. other production tasks

fashion item recommendation ;

the fashion item recommendation task, similar to the classical recommendation problem. focuses on suggesting individual fashion items(clothing)the matches users’ preferences.

2.fashion pair and outfit recommendation:

o\*=argmaxes(oj)

3.size recommendation:

the capacity to take measures with your mobile phone and use algorithm to look at other more subjective factors like fit, the softness of the fabric, smell of the material.

4.fashion recommendation:

* lack of consistency between brands
* subjectivity
* data sparsity
* noise
* physical body related features
* user item fit feedback

An explanation is a piece of information that is shown to users that describes why a particular item is recommended.in recent years there is growing number of studies on explainable .Recommendation in different domains notably in the fashion domain.

The following dimensions are interested to be studied.

* Explanation goal;
* Information source for explanation;
* Explanation target;
* categorization based on input

a) fashion Rs relying on user time interaction data.

b) fashion Rs relying on user item interaction and side information;

* + - * color
      * Brand
      * Deep visual features
      * textures
      * style
      * knowledge graph
      * textual features