

Ideation Phase

Literature Survey

Date	19 September 2022
Team ID	PNT2022TMID32325
Project Name	Smart Fashion Recommender Application

1) TITLE : A Review on the Literature of Fashion Recommender

2) AUTHOR : Angel Arul Jothi J and Razia Sulthana A.

ABSTRACT:Over the years, much research has been conducted on fashion recommendation systems. Different techniques such as image processing, machine learning, or deep learning have been incorporated in the recommendation systems. Online e-stores like Amazon, eBay, etc. customize fashion recommendation systems to satisfy the daily requirements of their customers. A number of different approaches are proposed to study the purchase pattern of the customers. This article reviews various works in fashion recommendations using deep learning that are published from 2016 to 2020. Researchers have used deep learning models distinctly or by pairing with other machine learning models in building the recommendation system. The manuscript provides a brief description of the persuading deep learning models that own a place in recommendation systems.

2)TITLE : Fashion Recommendation Systems, Models and Methods: A Review

AUTHORS : Samit Chakraborty ,Md. Saiful Hoque , Naimur Rahman Jeem ,Manik Chandra Biswas , Deepayan Bardhan and Edgar Lobaton

ABSTRACT :In recent years, the textile and fashion industries have witnessed an enormous amount of growth in fast fashion. On e-commerce platforms,

where numerous choices are available, an efficient recommendation system is required to sort, order, and efficiently convey relevant product content or information to users.

Image-based fashion recommendation systems (FRSs) have attracted a huge amount of attention from fast fashion retailers as they provide a personalized shopping experience to consumers. With the technological advancements, this branch of artificial intelligence exhibits a tremendous amount of potential in image processing, parsing, classification, and segmentation. Despite its huge potential, the number of academic articles on this topic is limited. The available studies do not provide a rigorous review of fashion recommendation systems and the corresponding filtering techniques. To the best of the authors' knowledge, this is the first scholarly article to review the state-of-the-art fashion recommendation systems and the corresponding filtering techniques. In addition, this review also explores various potential models that could be implemented to develop fashion recommendation systems in the future. This paper will help researchers, academics, and practitioners who are interested in machine learning, computer vision, and fashion retailing to understand the characteristics of the different fashion recommendation systems.

3)TITLE :Smart Fashion: A Review of AI Applications in Virtual Try-On & Fashion Synthesis

AUTHORS : Seyed Omid Mohammadi , Ahmad Kalhor

ABSTRACT : The rapid progress of computer vision, machine learning, and artificial intelligence combined with the current growing urge for online shopping systems opened an excellent opportunity for the fashion industry. As a result, many studies worldwide are dedicated to modern fashion related applications such as virtual try-on and fashion synthesis. However, the accelerated evolution speed of the field makes it hard to track these many research branches in a structured framework. This paper presents an overview of the matter, categorizing 110 relevant articles into multiple sub-categories and varieties of these tasks. An easy-to-use yet informative tabular format is used for this purpose. Such hierarchical application-based multi-label classification of studies increases the visibility of current research, promotes the field, provides research directions, and facilitates access to related studies.

4)TITLE : A Review on Clothes Matching and Recommendation Systems based on user Attributes

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

ABSTRACT :Dressing appropriately is very important when going out in the real world. Wearing clothes properly that show some level of style and wearing them such that they adhere to the norms of social standards uplifts the confidence of the person and creates a very good impression. The study focuses on helping the user to find optimized matching pair of clothes taking into account intricate details like style, patterns, colors, textures, etc. also keeping in mind users attributes like age, skin tone, favorite color etc. It aims to help the user choose clothes that are fashionable and organize their closet. It tries to help the user to wear clothes that are suitable for occasions and helps users to buy clothes that would suit their style. In this paper, an in depth study is performed of various systems that are developed for the various features that must be kept in mind for making a robust system that finds matching clothes of the user as well as makes recommendations. Systems developed to make recommendations of clothes using various approaches have been studied and their merits and demerits high-lighted. Systems that are used for clothes detection have also been studied to make the system user- friendly while the user provides input.

5)Title: Fashion evaluation method for clothing recommendation based on weak appearance feature

Authors: Mr. Yan Zhang and Mr. Xiang Liu

Published date:2017

Content: It proposed a method that evaluates the fashion level of an individual using weak appearance feature to evaluate fashion level. The proposed methodology put forward three major aspects of weak appearance to characterize fashion levels. It creates the first table as customer fashion level classification which characterized individuals based on the fashion level. The aim of this is to provide objective clothing recommendations to the customer. Then it creates the second table as a garment fashion level classification which is based on data from fashion designers, buyers, vendors, and producers. Then it extracts some features like the shape of the face, eyebrows placing, makeup, hair color, accessories, etc. Finally, the customer's fashion level can be characterized by "support vendor product". It has a great impact on clothing recommendation system, sometimes recommend lower level fashion.

6)Title: A case study on recommendation systems based on big data

Authors: M. Sandeep Kumar and j. Prabhu

Published date:2019

Content: Recommender systems mainly utilize for finding and recover contents from large datasets; it has been determining and analysis based on the scenario—big data. In this paper, we describe the process of recommendation system using big data with a clear explanation in representing the operation of mapreduce. We demonstrate the various stage of recommendation namely data collection rating, types of filtering. Analysis scenario based drug recommender system, it consists of three components namely drug storage, cloud server, and recommender server. The system is evaluating with specific parameters like fscore, precision, and recall. Finally, we describe the challenge of recommendation systems like data sparsity, cold start, sentimental analysis and no surprise.

References:

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2 .Paisios, Nektarios, L. Subramanian, and A. Rubinsteyn. "Choosing which clothes to wear confidently: A tool for pattern matching."(2012)
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