SMART FASHION RECOMMENDER APPLICATION

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PRE-REQUISITE:

To complete our project, we must have knowledge of the following.We need to have basic knowledge of the following cloud services:

- Python

- Flask

- Docker

GiTHUB ACCOUNT :

- Open https://github.com in a web browser, and then select Sign up**.**

- Enter your email address.

- Create a password for your new GitHub account, and Enter a username**,** too. Next, choose whether you want to receive updates and announcements via email, and then select Continue**.**

- Verify your account by solving a puzzle. Select the Start Puzzle button to do so, and then follow the prompts.

- After you verify your account, select the Create account button.

- Next, GitHub sends a launch code to your email address. Type that launch code in the Enter code dialog, and then press Enter.

- I have created my github account with the email id srimathi5802@gmail.com

INSTALLATION OF IDE'S:

Python is available from its website python.org. Once there, hover your mouse over the Downloads menu, then over the Windows option, and then click the button to download the latest release.

LITERATURE SURVEY

REVIEW- 1
Title Of The Paper:

Fashion Recommendation Systems

Name Of The Author:

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

Problem Description:

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. 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.In addition, this review also explores various potential models that could be implemented to develop fashion recommendation systems in the future.

REVIEW 2

Title Of The Paper :

Smart Fashion : A Review in Virtual Try-On & Fashion Synthesis

Name Of The Author:

Seyed Omid Mohammadi , Ahmad Kalhor

Problem Description:

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 fashionrelated 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.

REVIEW 3

Title Of The Paper:

A Review on Clothes Matching and Recommendation System Based on User Attributes

Name Of The Author:

Atharv Pandit , Kunal Goel , Manav Jain , Neha Katre

Problem Description

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 to occasions and helps user 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.

REVIEW 4

Title Of The Paper:

Image-Based Fashion Recommender System

Name Of The Author:

Shaghayegh Shirkhani

Problem Description:

Fashion is perceived as a meaningful way of self-expressing that people use for different purposes. It seems to be an integral part of every person in modern societies, from everyday life to exceptional events and occasions. Fashionable products are highly demanded, and consequently, fashion is perceived as a desirable and profitable industry. Although this massive demand for fashion products provides an excellent opportunity for companies to invest in fashion-related sectors, it also faces different challenges in answering their customer needs. Fashion recommender systems have been introduced to address these needs. This thesis aims to provide deeper insight into the fashion recommender system domain by conducting a comprehensive literature review on more than 100 papers in this field focusing on image-based fashion recommender systems considering computer vision advancements

REVIEW 5

Title Of The Paper:

Design and Implementation of Clothing Fashion Style Recommendation System

Name Of The Author:

Muhammad KHALID1 , Mao KEMING1 , Tariq HUSSAIN

Problem Description:

In recent years, the huge amount of information and users of the internet service, it is hard to know quickly and accurately what the user wants. This phenomenon leads to an extremely low utilization of information, also known as the information overload problem. Traditionally, keywords are used to retrieve images, but such methods require a lot of annotations on the image data, which will lead to serious problems such as inconsistent, inaccurate, and incomplete descriptions, and a huge amount of work. To solve this problem, Content Based Information Retrieval (CBIR) has gradually become a research hotspot. CBIR retrieves picture objects based entirely on the content. The content of an image needs to be represented by features that represent its uniqueness. Based on data-driven, this thesis uses convolutional neural network as a visual extractor of image objects. This experimental model shows and achieves better results than the ones of the previous schemes.

Paper Reference:

- Chen, Min, et al. "Smart clothing: Connecting human with clouds and big data for sustainable health monitoring." *Mobile Networks and Applications* 21.5 (2016): 825-845.

- Chen, Min, et al. "Wearable 2.0: Enabling human-cloud integration in next generation healthcare systems." *IEEE Communications Magazine* 55.1 (2017): 54-61.

- Santana, Eduardo Felipe Zambom, et al. "Software platforms for smart cities: Concepts, requirements, challenges, and a unified reference architecture." *ACM Computing Surveys (Csur)* 50.6 (2017): 1-37.