

## Literature Survey

Date	2 September 2022
Team ID	PNT2022TMID01420
Project Name	Smart fashion recommender application

**Title** : Smart fashion: A review of AI applications in virtual try-on and fashion synthesis

**Author** : Seyed omid Mohammadi, ahmad kalhor

**Year** 2021

**Advantage :**

virtual try-on is a highly active field, primarily, due to its potential application in the online fashion retail industry and also offline intelligent software packages used in clothing stores.

**Disadvantage:**

the main problem is the definition of a well structured and uniform objective metric to assess the results

**Title** :Outfit Recommender system

**Author** :Nikita Ramesh

**Year** :2018

**Advantage** as research in this field continuous, more and more interesting methods have come to light. Work once started using text based methods, turned to visual methods with image processing and use of CNN and now transfer learning with deepneural network.

**Disadvantage** this paper could be to use the nearest neighbour approach on an online store database instead of the current clothing database to suggest clothes. A user could then directly buy the recommended clothes if he/she wants to.

**Title** : Design and implementation of clothing fashion style recommendation system using Deep Learning.

**Author:** Mohammad Khalid, Maokeming, Tariq Hussain

**Year** : December 2021

**Advantage:**

The system first interacts with the user. A certain number of clothing pictures are listed for the user, and the user selects and scores the clothes suitable for them.

**Disadvantage :**

this paper presents the development of a system that recognize fashion similar images. For this purpose, they created a plan for collecting data and for developing the steps needed for preprocessing up the data like they took into account like features like patterns, machine, fabric style etc..

**Title** : Clothing fashion style recommendation system

**Author** : Wei dai

**Year** : may 2015

**Advantage** : it increase user interaction with the services they provide.

To demonstrate this clothing recommendation system we also develop two user interfaces, including a Web Application and an iOS App. Lastly, we discuss the approaches to secure the system and user privacy. We set up a Demo of this clothing recommendation system running on iPhone, which can achieve promising results within 5 seconds.

**Disadvantage** : fashion item representation, fashion item compactability, personalization and interpretable and explanation.

**Title** : A review of modern fashion recommender system

**Author:** Yashar deldjo, Fatemeh nazary, julian mcauley, Alejandro

**Year** : 2022

**Advantage :**

significant increase in your business revenues. Recommender systems help users navigate large collections of products to find items relevant to their interests leveraging large amounts of product information and user signals like product views, followed or ignored items, purchases or web-page visits to determine how, when and what to recommend to their customers.

Recommender systems have grown to be an essential part of all large Internet retailers, driving up to 35% of Amazon sales [103] or over 80% of the content watched on Netflix

**Disadvantage :**

fairness and Perhaps complexity and being naturally black-box models (relating to the preceding discussion about interpretation) are important aspects for consideration given that the majority of the techniques described are based on neural networks.

**Title** :Fashion recommendation system using CNN

**Author** :Sonu

**Year** 2021

**Advantage:**

If we people was like one product they immediately upload the photo that was show the similar products immediately.Time saving

**Disadvantage:**

They only upload photos only not any description.Photo uploading time ,net issues again we have to upload it data wastage

**Title** : "Fashion Intelligence Systems"

**Author:** Rushabh Musthyala, Archana Swaminathan, Shanmukh Kali Prasad

**Year** :2020

**Advantage:**

A mechanism for effectively ranking products on e-Commerce sites. A way to analyse trending and lagging products on fashion portals and magazines. For the solution to be scalable.

**Disadvantage:**

Scraping data from e-Commerce websites and fashion portals. Cleaning image data to remove unwanted artifacts (extracting only images of shirts). Learning feature encodings for all of the images. Computing a popularity metric (PM) to effectively combine the rating and number of reviews. Clustering the images based on their encodings to gain insight on what is trending and what is lagging.

**Title** : Dress Pattern Recognition using CNN

**Author:** Aakashjhawar

**Year** :2020

**Advantages:**

Predicts The dress pattern and suggests similar pattern dress images. Useful in e-commerce websites to suggest customer similar dresses based on their preferences.

**Disadvantages:**

Author only prefer selected number of dataset.Sometimes it might be problem because the customer wants same pattern but design that was diifcult to find



**Title** : Outfit recommendation system based on deep learning

**Authors** : Ying Huang, Tao Huang

**Year** 2017

**Advantage:**

It not only judges an outfit is good or not but also recommends best outfit to customers.

**Disadvantage:**

Huge data is needed to train the model since it is based on deep learning

**Title** : CFRS: A Trends – Driven collaborative Fashion Recommendation system

**Authors** : Maria Antassia Stefani, Vassilios Stefanis, John Garofalakis

**Year** : 2019

**Advantage:**

It has proposed a new metric called trend score which shows how trendy a product is and is calculated based on ratings by users.

**Disadvantage:**

The effectiveness of the system on the field needs to be evaluated.