Smart Fashion Recommender Application

Problem Statement:

A new innovative through which we can directly do online shopping based on our choice without any actual search, whereas it can be done by using the chatbot. The Chat-bot makes it easier for users to get their desired product for which they are looking for, through this chat. The chatbot gives recommendations based on the information provided by the user. This gives an experience of buying product in physical mode. Through chatbot, we can also send notification to the customer on updates of order and keep them in track, and finally also to get the feedback.

LITERATURE SURVEY:

1) **Personalized fashion recommender system with image based neural networks**

   Personalized Fashion Recommender system that generates recommendations for the user based on an input given. Unlike the conventional systems that rely on user's previous purchases and history, this project aims at using an image of a product given as input by the user to generate recommendations since many-a-time people see something that they are interested in and tend to look for products that are similar to that. It use neural networks to process the images from DeepFashion dataset and a nearest neighbour backed recommender to generate the final recommendations.

2) **An Intelligent Personalized Fashion Recommendation System**

   The proposed system significantly helps customers find their most suitable fashion choices in mass fashion information in the virtual space based on multimedia mining. There are three stand-alone models developed in this paper to optimize the analysis of fashion features in mass fashion trend: (i). Interaction and recommender model, which associated clients' personalized demand with the current fashion trend, and helps clients find the most favorable

fashion factors in trend. (ii). Evolutionary hierachical fashion multimedia mining model, which creates a hierachical structure to filer the key components of fashion multimedia information in the virtual space, and it proves to be more efficient for web mass multimedia mining in an evolutionary way. (iii). Color tone analysis model, a relevant and straightforward approach for analysis of main color tone as to the skin and clothing is used. In this model, a refined contour extraction of the fashion model method is also developed to solve the dilemma that the accuracy and efficiency of contour extraction in the dynamic and complex video scene. As evidenced by the experiment, the proposed system outperforms in effectiveness on mass fashion information in the virtual space compared with human, and thus developing a personalized and diversified way for fashion recommendation.

3) Interactive Design Recommendation Using Sensor Based Smart Wear and Weather WebBot

The interactive design recommendation using the sensor based smart wear and the weather WebBot (DRS-WB) is proposed. The proposed method is increasing the efficiency of merchandising for human-oriented sensibility product designs. Development of the DRS-WB included a user interface and collaborative filtering of textile and fashion designs to satisfy the user's needs. Collaborative filtering is used to recommend designs of interest for users based on predictive relationships discovered between the current user and other previous users. Current weather information is simultaneously acquired from the sensor based smart wear and the weather WebBot. The sensor based smart wear is fabricated as a way of non-tight and comfortable style fitting for the curves of the human body based on clothes to wear in daily life.

4) Intelligent travel chatbot for predictive recommendation in echo platform

Chatbot is a computer application that interacts with users using natural language in a similar way to imitate a human travel agent. A successful implementation of a chatbot system can analyze user preferences and predict collective intelligence. In most cases, it can provide better user-centric recommendations. Hence, the chatbot is becoming an integral part of the future consumer services. This paper is an implementation of an intelligent chatbot system in travel domain on Echo platform which would gather user preferences

and model collective user knowledge base and recommend using the Restricted Boltzmann Machine (RBM) with Collaborative Filtering. With this chatbot based on DNN, we can improve human to machine interaction in the travel domain.

REFERENCES:

1) https://ieeexplore.ieee.org/abstract/document/8301732
2) https://link.springer.com/article/10.1007/s11277-013-1234-5
3) https://iopscience.iop.org/article/10.1088/1757-899X/981/2/022073/meta