DOMAIN :
CLOUD APPLICATION DEVELOPMENT

SMART FASHION RECOMMENDER APPLICATION

ABSTRACT

With the quick rise in living standards, people's shopping passion grew, and their desire for clothing grew as well. A growing number of people are interested in fashion these days. . As a result of the suggested Fashion Recommendation System, a variety of online fashion businesses and web applications allow buyers to view collages of stylish items that look nice together. On the one hand, customers can make smarter shopping decisions and discover new articles of clothes that complement one other. Complex outfit recommendations, on the other hand, assist vendors in selling more products, which has an impact on their business. FashionNet is made up of two parts: a feature network for extracting features and a matching network for calculating compatibility. For FashionNet, you must create and compare three different architectures. To achieve individualised recommendations, a two-stage training technique was created.

INTRODUCTION

Fashion outfit recommendations are similar to conventional suggestion problems, but there is one important distinction to note: clothing components cannot be recommended separately. The fashion industry plays an important role in the global economy, with a complex industrial chain that includes garment design, manufacture, and distribution. Indeed, there has been an increase in demand for garments all across the world in recent years.

Accurate capture of a fashion model, on the other hand, is a difficult task because movies captured from virtual space are always dynamic and complicated scenes

A recommendation system is a system that is programmed to predict future preferable items from a large set of collections. A recommendation system works either by using user preferences or by using the items most preferred by all users. The main challenge in building a fashion recommendation system is that it is a very dynamic industry. It changes very often when it comes to seasons, festivals, pandemic conditions like coronavirus and many more.

LITERATURE REVIEW

[1] Hwangbo H., Kim Y.S., Cha K.J. Recommendation system development for fashion retail e-commerce .

Advantages : Recommendation systems are efficient machine learning solutions that can help increase customer satisfaction and user retention, and lead to a significant increase in your business revenues.

Disadvantages :Perhaps the biggest issue facing recommender systems is that they need a lot of data to effectively make recommendations.

[2] Sachdeva, H.; Pandey, S. Interactive Systems for Fashion Clothing Recommendation. In Emerging Technology in Modelling and Graphics.

Advantages : Proposed Content-Based Filtering Recommendation Algorithm.

Disadvantages: As it is CBF domain-dependent, rigorous domain knowledge is required to make precise recommendations

[3] Sonie, O.; Chelliah, M.; Sural, S. Concept to code: Deep learning for fashion recommendation. In Proceedings of the Companion Proceedings of The 2019 World Wide Web Conference on—WWW '19, San Francisco, CA, USA, 13–17 May 2019; pp. 1319–1320, doi:10.1145/3308560.3320100

Advantages : CBF does not need any information from other users, which makes this technique more feasible and less time consuming.

Disadvantages : The model only recommends products based on an existing database of previous users' interest, which restricts its expansion

[4] Gu, S.; Liu, X.; Cai, L.; Shen, J. Fashion coordinates recommendation based on user behavior and visual clothing style. In Proceedings of the 3rd International Conference on Communication and Information Processing—ICCIP '17, Tokyo, Japan, 24– 26 November 2017;

Advantges : Provides a valuable explanation, which motivates users to make decisions

Disadvantages : This method suffers limited content analysis issues, meaning users are restricted to the items already recommended.

[5] . Stefani, M.A.; Stefanis, V.; Garofalakis, J. CFRS: A trends-driven collaborative fashion recommendation system.

Advantages : It does not require contextual attributes. This technique can be applied to one of the multiple users' generators.

Disadvantges : Single-rating CF was successful whereas multicriteria rating is still under optimization.

REFERENCE

[1}https://www.downloadmaghaleh.com/wp-content/uploads/edd/maghaleh/1398/13301.pdf

[2]https://www.researchgate.net/publication/353485380_Fashion_Recommendation_Systems_Models_and_Methods_A_Review

[3] https://dl.acm.org/doi/abs/10.1145/3308560.3320100

[4] https://dl.acm.org/doi/abs/10.1145/3162957.316298

[5] https://www.researchgate.net/publication/337542287_CFRS_A_Trends-Driven_Collaborative_Fashion_Recommendation_System

CONCLUSION

In this project, we have presented a novel framework for fashion recommendation that is driven by data, visually related and simple effective recommendation systems for generating fashion product images. The proposed approach uses a two-stage phase. Initially, our proposed approach extracts the features of the image using CNN classifier ie., for instance allowing the customers to upload any random fashion image from any E-commerce website and later generating similar images to the uploaded image based on the features and texture of the input image. It is imperative that such research goes forward to facilitate greater recommendation accuracy and improve the overall experience of fashion exploration for direct and indirect consumers alike.