## **Smart Fashion Recommender Application**

Date	10.10.2022
Team ID	PNT2022TMID14283
Project Name	Smart Fashion Recommender Application

## **Literature Survey:**

To put this survey in context, they identified and present related review and survey articles to explain in which ways our article differs from and extends earlier work. In a recent work. Presented a survey of RS leveraging multimedia content, i.e., visual, audio, and/or textual features. The domains studied in this survey include various ones such as media streaming for audio and video recommendation, e-commerce for recommending different products including fashion items, news, and information recommendation, social media, and so forth. While fashion RS were also discussed, the authors only included a small portion of the topics and papers in this domain. Here, they discuss and present a comprehensive survey of significant tasks, challenges, and types of content used in the fashion RS field. They have also identified surveys where the authors present a literature review of techniques at the intersection of fashion and computer vision (CV) and/or natural language processing (NLP). While they find these works relevant to this article, they remain largely different from the review presented here as those systems are not focused on RS but on other aspects of the fashion domain, such as text generation from images or pose estimation. Moreover, as another point of difference, they also provide recent techniques dealing with item visual and textual content representation exploited by RS approaches. Perhaps the most relevant work to our current survey is a recent book chapter by Jaradat et al. This chapter focuses on discussing the state of the art of fashion recommendation systems; in particular, the authors affirm that deep learning represented a turning point with respect to the canonical approaches and therefore the authors examined four different tasks that use this new approach. Additionally they provided examples and possible problems and their evaluation. In particular, the authors focused their review on tasks related to social media and the size recommendation problem. In their survey, in addition to analyzing the state of the art of the most commonly used algorithms in a wide range of tasks, we went in depth to understand which are the main features used by the more modern fashion recommender systems. In fact, an extensive discussion is held on how both the user and the items, with their characteristics, can be a source for the definition of models with accurate

recommendations. Furthermore, since the fashion domain focuses on visual aspects, an in-depth study is also included here on computer vision approaches for increasing the understanding of item images.

## **PROPOSED SYSTEM:**

The word "Fashion" is derived from the translation of VOUGE, a popular US fashion magazine. Fashion is a way of life and awareness of pursuing what is truly good and what suits the best. We provide a model that utilizes nearest neighbour backed recommender systems and convolutional neural networks. Following the training of the neural networks, an inventory is chosen for the purpose of providing recommendations, and a database is built for the products in the inventory. Based on the supplied image, the nearest neighbor's algorithm is utilized to locate the most pertinent products, and suggestions are provided. The classification of fashion level is a subjective process that requires a group of experts to provide a subjective assessment of the visual characters. The subjective technique is directly tied to subjective elements, such as the experts' educational backgrounds and motivations on the inside. Actually, this is resource-intensive, time-consuming, and produces inconsistent data classification results. Images are chosen from collections of images amassed via work, study, amusement, and downtime, as well as from the Internet.

## REFERENCE:

Khalid, Muhammad & Keming, Mao & Hussain, Tariq. (2021). Design and implementation of clothing fashion style recommendation system using deep learning. Revista Română de Informatică și Automatică. 31. 123-136. 10.33436/v31i4y202110.

Cheng, W. H., Song, S., Chen, C. Y., Hidayati, S. C., & Liu, J. (2020). Fashion meets computer vision: A survey. arXiv preprint arXiv:2003.13988.

Song, S., & Mei, T. (2018). When multimedia meets fashion. IEEE MultiMedia, 25(3), 102-108.

Guan, C., Qin, S., Ling, W., & Ding, G. (2016). Apparel recommendation system evolution: an empirical review. International Journal of Clothing Science and Technology.

Lu, J., Wu, D., Mao, M., Wang, W., & Zhang, G. (2015). Recommender system application developments: a survey. Decision Support Systems, 74, 12-32.

Zorn, T., & Campbell, N. (2006). Improving the writing of literature reviews through a literature integration exercise. Business Communication Quarterly, 69(2), 172-183.

Samit Chakraborty, Md. Saiful Hoque, Naimur Rahman Jeem-Fashion Recommendation Systems, Models and Methods: A Review

M Sridevi, N ManikyaArun, M Shashikala, and E Sudarshan-Personalized fashion recommender system with image-based neural networks

Clothing Fashion Style Recommendation System A Thesis Presented by Wei Dai

Samit Chakraborty, Md. Saiful Hoque, S.M. Surid- A Comprehensive review on image-based style prediction and online fashion recommendation