

SMART FASHION RECOMMENDATION SYSTEM

Literature survey

Girshick et.al [1] (2018) propose to recommend images by explicitly learning and exploiting part based similarity. Here the author proposed a novel approach of learning discriminative features from weakly supervised data by using visual attention over the parts and a texture encoding network. It shows that the learned features surpass the state-of-the-art in retrieval task on the Deep Fashion dataset. Finally, the author used the proposed model to recommend fashion images having an explicit variation with respect to similarity of any of the parts.

Goel D et.al [2] (2015) online shopping systems are looking for a method that can recommend items according to the user preference. The author proposes a content-based clothing recommender system using deep neural networks. In content-based systems, product features are required for prediction of unobserved items ratings. In here the author proposed a system by using a deep neural network, the cloth category is obtained and the need to manually extract the product features is eliminated by producing the required features with a large and useful volume. The main advantage of the author system is to specify gender as a feature in making suggestions then shows the results to the user

Isinkaye F et.al [3] (2015) the author present an item-to-set metric learning framework that learns to compute the similarity between a set of historical fashion items of a user to a new fashion item. To extract features from multi-modal street-view fashion items, the author propose an embedding module that performs multi-modality feature extraction and cross-modality gated fusion. To validate the effectiveness of the author approach, the author collects a real-world social media dataset.

Lieberman H and Lam F [4] (2021) purpose of the author is to develop a system which outputs outfit images with partially modified outfit of the input image according to the user's preferred style. The author creates the user's original dataset to learn the user's preference in advance by asking the user to classify a group of images into 4 styles. So he conducted an evaluation experiment of our system to confirm that our system reflects the user's individual preference. As a result of the evaluation -experiment, it was confirmed that the same image was recommended as different styles for different users, and that the users also thought that the recommended style matched the current style of the user's classification of the style.

Ren S et.al [5] (2017) propose a collaborative fashion recommendation system called CFRS. The author proposed a new metric called trend score. Trend score shows how trendy a product is and calculated the rating provided by CFRS users. Finally the author used the algorithm to analyse the trend score and sorting the product of each category from trendiest.

References:

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[3] Isinkaye F, Folajimi Y and Ojokoh B, "Recommendation systems: principles, methods and evaluation", Egyptian Informatics J., vol. 16, no. 3, pp. 261-273, 2015

[4] Lieberman H, Shen E and Lam F, " fashion recommendation reflected individual's preferred style " published in 2021 IEEE 10th Global Conference on Consumer Electronics (10.1109/GCCE53005.2021.9622080).

[5] Ren S et al, "Faster R-CNN: Towards Real-Time Object Detection with Region Proposal Networks," IEEE Trans. Pattern Anal. Mach. Intell., vol. 39, (6), pp. 1137-1149, 2017. DOI: 10.1109/TPAMI.2016.2577031.