# SMART FASHION RECOMMENDER APPLICATION

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#### **ABSTRACT**

- Recommendation systems are the techniques that are used to predict the rating one individual will give to an item or social entity.
- These preferences are being predicted using two approaches first content-based approach which involves characteristics of an item and second collaborative filtering approaches which considers user's past behaviour to evaluate its choices.

### **METHODOLOGY**

- A **convolutional neural network (CNN)** is constructed of multiple convolutional layers, where the number of layers is customized based on the desired recommendation system outcome.
- Recurrent neural network (RNN) is a generalization of feed forward neural network that has an internal memory. RNN can use the internal state (memory) to process sequences of inputs.
- Generative adversarial networks (GAN) are deep-learning-based generative models in which two neural networks (generator and discriminator) compete to become more accurate in their predictions.

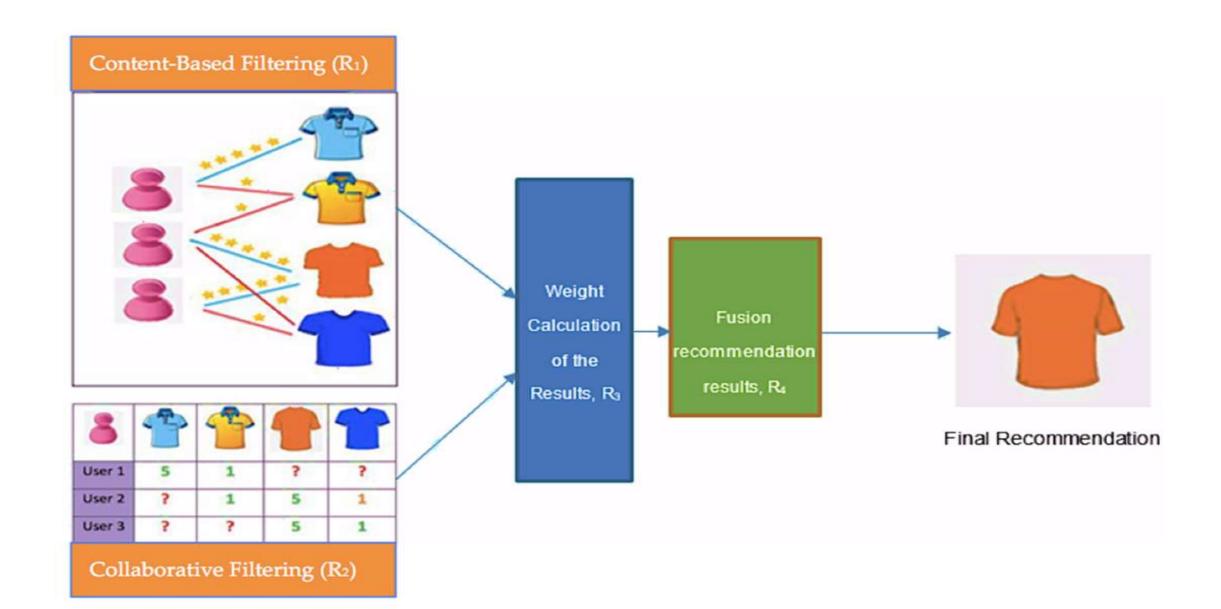
#### **BENEFITS**

- Products recommended based on the evaluation of experienced users.
- Content-based filtering(CBF) does not need any information from other users, which makes this technique more feasible and less time consuming.
- Content-based filtering(CBF) can attain the specific interest of a user and make recommendations accordingly.
- Provides a valuable explanation, which motivates users to make decisions.

#### LIMITATIONS

- As it is Content-based filtering(CBF) domain -dependent, rigorous domain knowledge is required to make precise recommendations.
- The model only recommends products based on an existing database of previous users' interest, which restricts its expansion.
- Due to cold start problem, cannot be applied to make recommendations to new users.
- This method suffers limited content analysis issues, meaning users are restricted to the items already recommended.

## ARCHITECTURE



# LITERATURE SURVEY

PAPER TITLE	TECHNIQUES/ ALGORITHM USED	MERITS	LIMITATION	FUTURE SCOPE