Project : Book Recommendation System

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Project Overview

A recommendation system is an artificial intelligence or AI algorithm, usually associated with machine learning, that uses Big Data to suggest or recommend additional products to consumers. These can be based on various criteria, including past purchases, search history, demographic information, and other factors.

Advantages

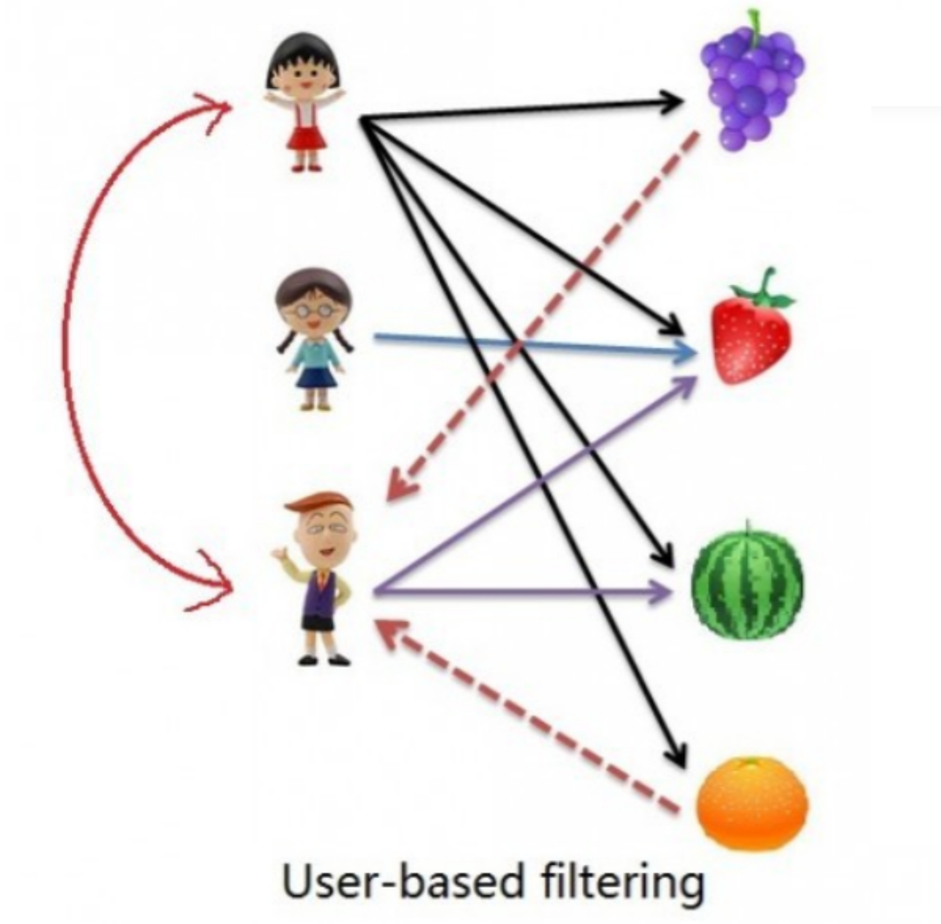
- Model doesn’t need data of other users since recommendations are specific to a single user.
- It makes it easier to scale to a large number of users.

1. Content-Based Filtering

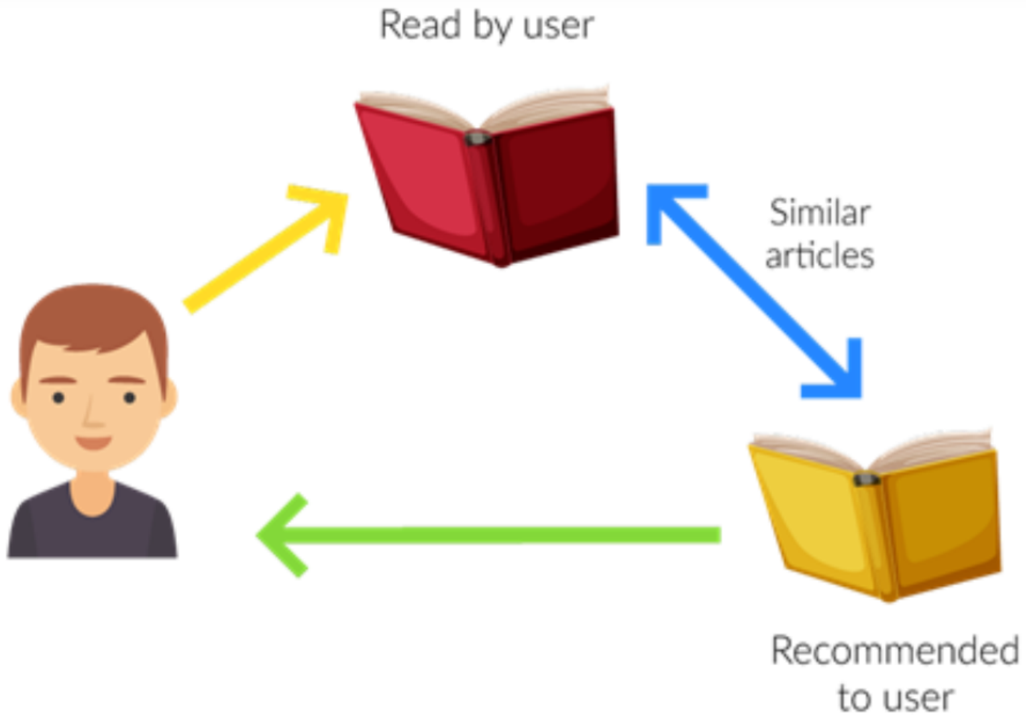
Let us take an example of the movie recommendation system where every movie is associated with its genres which in the above case is referred to as tag/attributes. Now let assume user A comes and initially system don’t have any data about user A. so initially, the system tries to recommend the popular movies to the users or the system tries to get some information of the user by getting a form filled by the user.

2. Collaborative Based Filtering

Let us take an example of the movie recommendation system where every movie is associated with its genres which in the above case is referred to as tag/attributes. Now let assume user A comes and initially system don’t have any data about user A. so initially, the system tries to recommend the popular movies to the users or the system tries to get some information of the user by getting a form filled by the user.



User-based filtering



Project Demonstration

Project Future

Neural Networks and Deep Learning have been all the rage the last couple of years in many different fields, and it appears that they are also helpful for solving recommendation system problems.

Ben Allison, a Principal Machine Learning Scientist at Amazon, gave a great talk earlier this year at Amazon's re: MARS conference about building recommender systems using Recurrent Neural Networks and Deep Learning.

One of the benefits of Deep Learning is similar to matrix factorization, in that there is an ability to derive latent attributes. Deep Learning, however, can make up for some of the weaknesses of matrix factorization such as the inability to include time in the model — which standard matrix factorization isn't designed for.

Project Plans

- create a website which recommend you everything
    - Movie Recommendation
    - Book Recommendation
    - E-commerce Product
    - Hotel Recommendation
    - Clothes Recommendation
    - Acessories Recommendation

Thank you