

DAILY ASSESSMENT FORMAT

Course:	Machine learning with Python	Name:	Bindu.N.R
Link:	https://cognitiveclass.ai/courses	USN:	4AL17EC101
Org By :	IBM	Semester & Section:	6-B
Github Repository:	bindunr-python	Date:	20/06/2020

Progress on 20-06-2020

• Topic Completed Today

The screenshot shows a video player interface. The video title is "Intro to Recommender Systems (4:33)". The slide content is as follows:

Two types of recommender systems

Content-Based

"Show me more of the same of what I've liked before"

Collaborative Filtering

Similar items

The slide includes a diagram showing a user profile (a person icon) with arrows pointing to several movie posters. One poster is highlighted with a red box. A curved arrow labeled "Similar items" points from the highlighted poster to another poster.

recommendation systems: Content-based and collaborative filtering.

The main difference between each, can be summed up by the type of statement that a consumer might make. For instance, the main paradigm of a Content-based recommendation system is driven by the statement: "Show me more of the same of what I've liked before."

Content-based systems try to figure out what a user's favorite aspects of an item are, and then make recommendations on items that share those aspects.

Collaborative filtering is based on a user saying, "Tell me what's popular among my neighbors because I might like it too." Collaborative filtering techniques find similar groups of users, and provide recommendations based on similar tastes within that group.

In short, it assumes that a user might be interested in what similar users are interested in.

Also, there are Hybrid recommender systems.

Collaborative Filtering (7:06)

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Collaborative Filtering (7:06)

Challenges of collaborative filtering

- **Data Sparsity**
 - Users in general rate only a limited number of items
- **Cold start**
- **Scalability**

neighbors, as they were positively rated by both User1 and User2. So, Item 1 can be recommended to User 3 as he has already shown interest in Item3. Therefore, the recommendations here are based on the items in the neighborhood that a user might prefer.

Collaborative filtering is a very effective recommendation system, however, there are some challenges with it as well. One of them is Data Sparsity.

Data sparsity happens when you have a large dataset of users, who generally, rate only a limited number of items. As mentioned, collaborative-based recommenders can only predict scoring of an item if there are other users who have rated it.

Due to sparsity, we might not have enough ratings in the user-item dataset, which makes it impossible to provide proper recommendations. Another issue to keep in mind is something called 'cold start.' Cold start refers to the difficulty the recommendation

5:55 / 7:06 Speed 1.0x HD

Video Transcripts

• Progress Report

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Course Progress for Student 'Bindu_N_R' (bindu6433@gmail.com)

Assessment	Progress (%)
RQ 01	100%
RQ 02	100%
RQ 03	100%
RQ 04	100%
RQ 05	100%
RQ Avg	100%
Final	0%
Total	50%

Welcome!

Welcome! (3:15)

No problem scores in this section