

‘Bad Movies’ Recommendation

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Intuition --- Only Bad for Movie Critics

- Some of our favourite movies were surprisingly panned by critics, but had been very popular by general audiences
- These movies might not get the headlines in magazine or newspaper written by professional critics and therefore less exposure are very likely to be ignored by us.

The screenshot shows the Rotten Tomatoes search results for "BLACK PANTHER" (2018). At the top, it says "Part of the Collection: Marvel Cinematic Universe" and has a "View Collection" button. Below that is a movie poster. To the right of the poster are two main rating sections: "TOMATOMETER" (97% fresh) and "AUDIENCE SCORE" (79% liked it). Both sections include a brief critics' consensus. Below these are links for "All Critics" and "Top Critics". At the bottom of the page, there are navigation links for "All", "News", "Videos", "Images", "Shopping", "More", "Settings", and "Tools". A note at the bottom states "About 9,810,000 results (0.19 seconds)".

The screenshot shows the Rotten Tomatoes search results for "DEATH WISH" (2018). At the top, it has a "TOMATOMETER" (18%) and an "AUDIENCE SCORE" (81%). Both sections include a brief critics' consensus. Below these are links for "All Critics" and "Top Critics". At the bottom of the page, there are buttons for "ADD YOUR RATING", "- NOT INTERESTED", "+ WANT TO SEE", and a star rating bar. A note at the bottom states "About 2,520,000 results (0.37 seconds)".

Black Panther To Be Highest Grossing Superhero Of All Time
Forbes - 7 hours ago
After it reaches \$1.2 billion this week, **Black Panther** still has enough gas left in its tank to add an additional \$60-80+ million in global revenue to its cume, depending on what happens over the next few weekends as some potentially major contenders arrive, including *Pacific Rim Uprising*, *Ready Player One* ...

Black Panther Breaks Twitter Record
Voice of America - 22 hours ago
'Black Panther' breaks another record, becoming the most tweeted ...
Los Angeles Times - 19 hours ago

Death Wish: Better than Original?
Winchester News Gazette - Mar 20, 2018
Bruce Willis stars in a remake of the 1974 Charles Bronson movie **Death Wish**. Willis plays Dr. Paul Kersey whose wife and daughter are attacked in a brutal home invasion. After his wife dies, the Chicago doctor purchases some guns and begins hunting down the killers. The vigilante is soon dubbed "The ...

Mission Statement

Based on user's taste such as favorite movie or favorite genres, recommend similar movie that users are very likely to ignore because of low ratings from critics



BIG DADDY

TOMATOMETER **40%**
All Critics | Top Critics

Critics Consensus: Adam Sandler acquits himself admirably, but his charm isn't enough to make up for *Big Daddy's* jarringly shifts between crude humor and mawkish sentimentality.

Average Rating: 4.9/10
Reviews Counted: 93
Fresh: 37
Rotten: 56

AUDIENCE SCORE **74% liked it**
All Critics | Top Critics

Average Rating: 3.5/5
User Ratings: 1,052,024

ADD YOUR RATING

- NOT INTERESTED + WANT TO SEE

Add a Review (Optional)



HOTEL TRANSYLVANIA

TOMATOMETER **44%**
All Critics | Top Critics

Critics Consensus: Hotel Transylvania's bouncy, giddy tone may please children, but it might be a little too loud and thinly-scripted for older audiences.

Average Rating: 5.3/10
Reviews Counted: 142
Fresh: 63
Rotten: 79

AUDIENCE SCORE **72% liked it**
All Critics | Top Critics

Average Rating: 3.8/5
User Ratings: 150,781

ADD YOUR RATING

- NOT INTERESTED + WANT TO SEE

Add a Review (Optional)

Post

Data

MovieLens Latest Datasets

Collected by GroupLens, a research group at University of Minnesota

Datasets include 26,000,000 ratings across 45,000 movies by 270,000 users

The Open Movie Database

Dataset contains movie ratings from different sources such as IMDB and Rotten Tomatoes.

Data Variables

Rating: Made on 5-star scale, with 0.5 star increment by different users

Movie title: Titles of movies corresponding to movie IDs

Genres: 19 genres included such as Action and Comedy

TomatoMeter: ratings given by the approved Tomatometer critics

TomamoUserMeter: ratings given the general users

movied	title	genres
0	Toy Story (1995)	Adventure Animation Children Comedy Fantasy
1	Jumanji (1995)	Adventure Children Fantasy
2	Grumpier Old Men (1995)	Comedy Romance
3	Waiting to Exhale (1995)	Comedy Drama Romance
4	Father of the Bride Part II (1995)	Comedy
5	Heat (1995)	Action Crime Thriller

	userId	movied	rating	timestamp
0	1	2	3.5	1112486027
1	1	29	3.5	1112484676
2	1	32	3.5	1112484819
3	1	47	3.5	1112484727
4	1	50	3.5	1112484580
5	1	112	3.5	1094785740
6	1	151	4.0	1094785734
7	1	223	4.0	1112485573
8	1	253	4.0	1112484940
9	1	260	4.0	1112484826
10	1	293	4.0	1112484703

Input

- One of your favourite movies

Search

Movie Person

Enter a movie title

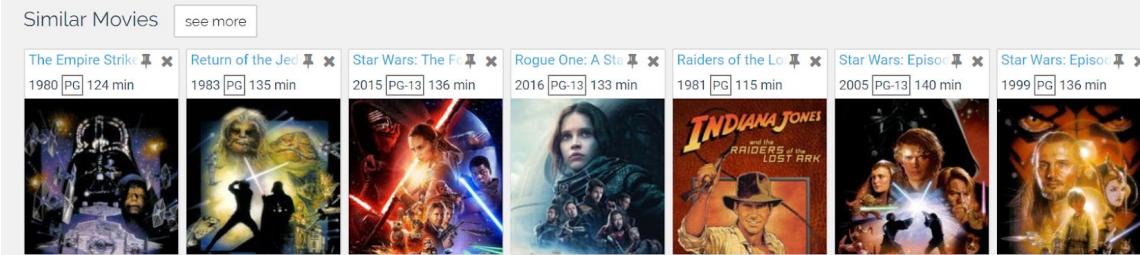
- One of you favorite film genres

Select your taste

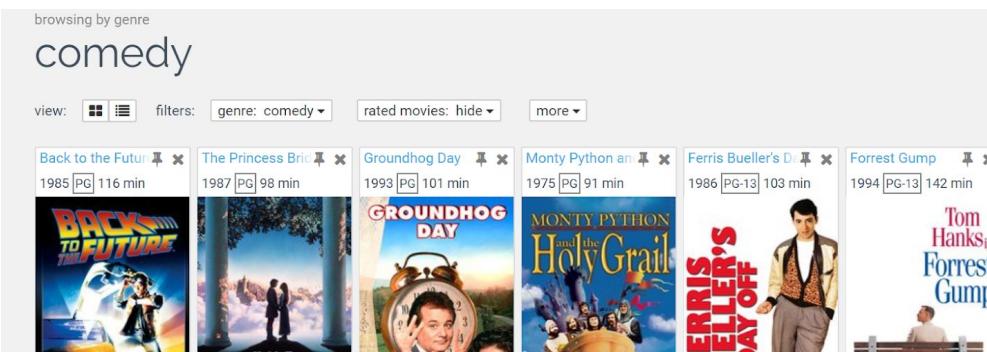


Output

- 10 similar movies you may like based on your favorite movie



- Top 10 rated movies from your favorite genres



Main Algorithm: Memory-Based Collaborative Filtering

- Two main sections: user-item filtering and item-item filtering
- Item-item filtering will take an item, find users who liked that item, and find other items that those users or similar users also liked
- Use distance metric to measure similarity
- It is a simple algorithm to implement for any situation which produce reasonable prediction quality

Other Involving Algorithms

- Classify the movie panned by by critics, but popular among general audiences
 - Download data and movie posters using 'The Movie Database' API
 - Use Cross-validation to evaluate our item-item collaborative filtering algorithm
- If the model does not perform well, may consider model-based collaborative filtering or Hybrid recommender system.