



film_finder

A TV & MOVIE RECOMMANDATION SYSTEM

Finding films that you'll enjoy.

Agenda

- 1. Project Goals**
- 2. Data Overview**
- 3. Collaborative Based Filtering**
- 4. Content Based Filtering**
- 5. Conclusions**
- 5. Next Steps**





PROJECT GOALS



Data Understanding



VIDEO META DATA

- Titles
- Starring
- Descriptions
- Movie_ID's



USER REVIEW DATA

- Users
- User Ratings
- User Reviews
- Movie_ID's

Data Preparation

Magazine Subscriptions	reviews (69,009 reviews)	metadata (5,495 products)
Movies and TV	reviews (8,765,568 reviews)	metadata (203,970 products)
Musical Instruments	reviews (1,512,530 reviews)	metadata (120,400 products)

Amazon
User/Product
Data: 1996 - 2018

DATA PREPARATION: COLLABORATIVE SYSTEM



**REMOVE VIDEO
CONTENT NOT IN
ENTERTAINMENT**



**REMOVE DUPLICATE
USER-VIDEO REVIEWS**



**REMOVE USERS WITH
LESS THAN 4 REVIEWS**

Collaborative Filtering Model

■ RMSE

	movie_id	predicted_rating	genre	description		title	starring
0	B004HHX9PK	5.0	Drama	San Francisco Police Commissioner Stewart Mac ...	McMillan and Wife: Season 3		Various Artists
1	B00EOMJ9O8	5.0	TV	NaN	Heartland: The Complete Sixth Season		Lauren Brooke
2	B00AJXO48W	5.0	Drama	Jack Klugman returns as television's orig...	Quincy, M.E.: Season 5		Jack Klugman
3	B005DJDF2I	5.0	Science Fiction & Fantasy	Three friends decide to turn their fantasy vac...	Zindagi Na Milegi Dobara		Hrithik Roshan
4	B0013XZ6UM	5.0	Drama	Donna Selby (Kirstie Alley, TV's "Cheers") and...	Profoundly Normal		Kirstie Alley
1	merged_df.loc[merged_df['user_id'] == user_id]						
	rating	user_id	movie_id	genre	description	title	starring
313333	5	A1DR7OB5TSUUAI	B00003CY5F	Sony Pictures Home Entertainment	NaN	America's Sweethearts VHS	Julia Roberts
829214	4	A1DR7OB5TSUUAI	B002ZG99UY	Warner Home Video	The starriest cast you may ever see sparkles i...	Valentine's Day	Bradley Cooper
1817031	5	A1DR7OB5TSUUAI	B01BDUS0NY	All Fox Titles	Based upon Marvel Comics most unconventional a...	Deadpool 2016	Various Artists
1915813	5	A1DR7OB5TSUUAI	B0000TGA0U	Warner Home Video Comedy	<I>Sex and the City</I> is based on Candace Bu...	Sex and the City: The Complete First Five Seasons	Sarah Jessica Parker
1987741	5	A1DR7OB5TSUUAI	B0017XFSOM	BBC	NaN	Hotel Babylon Season 2	Various Artists

DATA PREPARATION: CONTENT BASED SYSTEM



Content Based Filtering

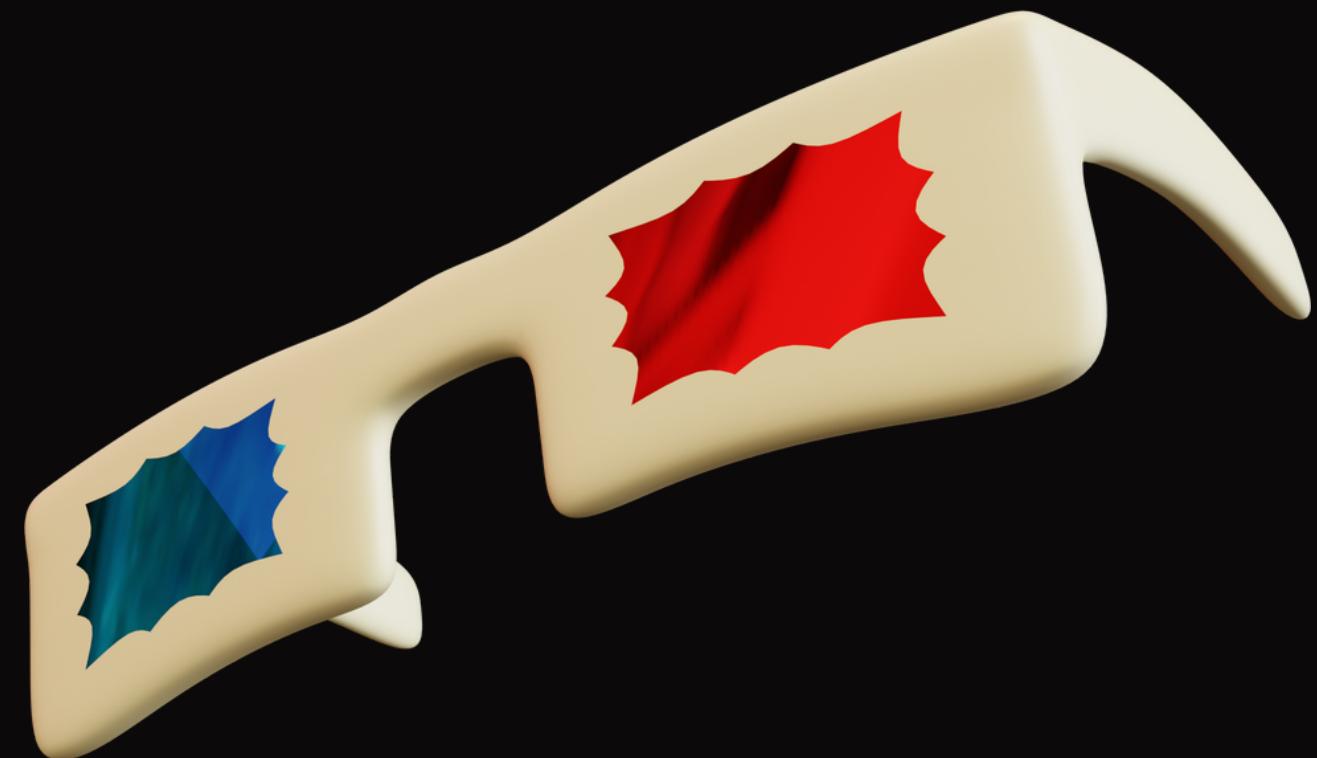
Input movie information:

	title	genre	starring
Santa Claus Is Comin' To Town VHS	Animation	Fred Astaire	

Recommended movies:

		title	genre	starring	movie_id
1240	The Stingiest Man in Town VHS	Animation	Walter Matthau	6301760379	
20621	Bah, Humduck! A Looney Tunes Christmas	Animation	Charles Visser	B000HC2LH6	
20812	The Night Before Christmas: A Mouse Tale	Animation	Various Artists	B000HLDFLS	
26883	Care Bears 25th Anniversary Gift Set	Animation	Dan Hennessey	B000VKKV3A	
40891	The Wheels on the Bus... and More Musical Stories	Animation	Various Artists	B0039ZBM78	

CONCLUSIONS





Next Steps

What goes behind the screen

**Compare User
Reviews vs
Movie
Descriptions for
features**

**Further Filtering
of Genres using
Classification
Model**

**Combine
systems**

Host App

Thanks for your time. Let's Talk!

Github

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