



PrimeTimeTM

An Amazon Prime Video - Content Based -
Recommendation System

Introduction



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Today's Agenda



Business
Understanding

Data
Understanding

Methodology

Limitations

Next Steps

prime video



Business Understanding

- Losing customer base to competitors
- Prime Video ranked 2nd
- Tried neural networks and other machine learning

Data Understanding

- Kaggle.com
- JustWatch Movie ID's

kaggle



Methodology

Leverage content based filtering
approach

Cosine Similarity

cos_movie_recommend()							
executed in 7.08s, finished 17:33:55 2022-06-01							
Title: The General							
How many recommendations? 5							
Would you like MOVIE or SHOW recommendations? MOVIE							
	Movie Title	Type	Release Year	Runtime (minutes)	Genres	IMDB Score	Cast Name
0	All Hat	MOVIE	2007	89	[action, comedy, drama, western, european]	5.1	Rachael Leigh Cook,Luke Kirby,Keith Carradine,...
1	Vendetta	MOVIE	1971	92	[western, comedy, drama, action, european]	4.6	Telly Savalas,Clint Walker,José María Prada,Án...
3	A Fistful of Dynamite	MOVIE	1971	157	[western, european, drama, war]	7.6	Rod Steiger,James Coburn,Romolo Valli,Maria Mo...
4	Let the Bullets Fly	MOVIE	2010	132	[comedy, drama, western, action]	7.2	Chow Yun-Fat,Ge You,Jiang Wen,Carina Lau,Chen ...
5	Kabullywood	MOVIE	2017	84	[drama, comedy, war, european]	7.2	Mohd Qais Shaghasy,Farid Joya,Roya Heydari,Ghu...

K-Nearest Neighbors

knn_movie_recommend()							
executed in 5.40s, finished 17:49:10 2022-06-01							
Title: The General							
How many recommendations? 5							
Would you like MOVIE or SHOW recommendations? MOVIE							
	Movie Title	Type	Release Year	Runtime (mins)	Genres	IMDB Score	Cast Name
0	All Hat	MOVIE	2007	89	[action, comedy, drama, western, european]	5.1	Rachael Leigh Cook,Luke Kirby,Keith Carradine,...
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Limitations

- Relied on JustWatch Movie ID
- Small number of titles
- Proprietary data

Next Steps

- Expand data & webscraping
- Deploying to mobile/web app



Git In Touch

Any Questions?



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