Recommendation Engines

Metis SF Fall 2016 Data Science Cohort 4

Recommendation Engines





Frequently Bought Together



Price for all three: \$94.23

Add all three to Cart | Add all three to Wish List

Show availability and shipping details

- This item: 1500 Thread Count Queen 4pc Bed Sheet Set Egyptian Quality Deep Pocket White by Choice Linen \$25.75
- Chezmoi Collection White Goose Down Alternative Comforter, Full/Queen with Corner Tab by Chezmoi Collection \$44,49
- ☑ Dream Supreme Plus Gel Fiber-Filled Pillows, Standard (Set of 2) by Dream Supreme Plus \$23.99

Customers Who Bought This Item Also Bought



1500 Thread Count Queen 4pc Bed Sheet Set Egyptian Quality Deep Pocket Sage **☆☆☆☆☆ (216)** \$25.75



Dream Supreme Plus Gel Fiber-Filled Pillows, Standard (Set of 2) ★★★☆☆ (920) \$23.99



Royal Hotel's 1200 Thread Count Queen Size Siberian Goose Down Alternative Comforter 100% Egyptian ... **全市** 中 (32) \$84.99



Chezmoi Collection White Goose Down Alternative Comforter, Full / Queen with Corner Tab **☆☆☆☆☆ (242)** \$44.49



3pc Egyptian Duvet Cover Set 1200 Thread Count Queen Size White ☆☆☆☆ (139) \$23.49

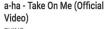


Queen Si Feather a Pillows - ! *** \$26.24

Up next









307.150.432 views



Mix - Rick Astley - Never Gonna Give You Up

YouTube



Rick Astley - Together Forever

RickAstleyVEV0 23,787,355 views



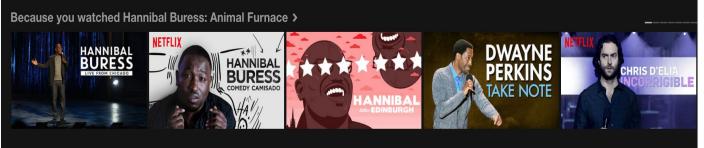
I Wanna Dance With Somebody (Legendado)

Bevoncé LEGENDAS 8.070.450 views



MC Hammer - U Can't Touch This

emimusic 258.728.525 views



Recommendation = Filtering

Collaborative Filtering

- Past behavior
- Similar users
- Search history, purchase history, viewing history

Collaborative Filtering

Pros:

Recommendations are based on qualitative data inputs and comparisons to peers in a similar userbase for personally tailored or serendipitous/"unexpected" suggestions.

Cons:

Cold start - insufficient data to generate useful recommendations.

Recommendation = Filtering

Content-Based Filtering:

- Item-focused features/tags/ratings/rankings
- Machine Learning (Bayes-ian classifiers, clusters, decision trees, neural networks)
- Apply weighting vectors

Content-Based Filtering

Pros:

No Cold Start effect. Does not rely on user input or behavior.

Cons:

Attributes must be machine-recognizable.

No personal consideration of style or quality or POV

Hybrid Filtering

Combine Collaborative & Content-Based:

- Example: Netflix
- CF: Users watched/search history
- C-BF: Recommended based on shared tags/features with films user rated highly

67% of Netflix Users Share An Account with Friends/Family



Multiple Account Creation

Who's watching?



Dave



Dave and friends



Sad, reflective Dave



Dave after a few drinks



Guns and explosions