

MOVIE RECOMMENDER IN PYTHON

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ABOUT US



J Beightol
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MOVIE RATINGS

COSINE SIMILARITY FORMULA

VECTOR MAGNITUDE

VECTOR NORMALIZATION (THE UNIT VECTOR)

DOT PRODUCT

DOT PRODUCT INTUITION

WHY DO WE NORMALIZE?

CONTENT-BASED RECOMMENDERS

Recommenders based on product features.

Title	Year	Genre	Director	MPAA Rating
Elf	2003	Christmas/Comedy	Jon Favreau	PG
Die Hard	1988	Christmas/Action	John McTiernan	R
How to Train Your Dragon	2010	Animation/Action	Dean DeBlois Chris Sanders	PG

COLLABORATIVE RECOMMENDERS: USER BASED

Recommendations based on **users with similar ratings**

	Movie 1	Movie 2	Movie 3
User 1	5	1	NOT RATED
User 2	4	1	4
User 3	1	5	1

COLLABORATIVE RECOMMENDERS: USER BASED

Recommendations based on **users with similar purchases**

	Movie 1	Movie 2	Movie 3	Movie 4
User 1	1	0	1	??
User 2	1	0	1	1
User 3	0	0	0	0

COLLABORATIVE RECOMMENDERS: ITEM BASED

Recommendations based on **products with similar ratings/purchase vectors**

	User 1	User 2	User 3
Movie 1	4	5	2
Movie 2	2	1	5
Movie 3	5	4	2