



Netflix Movie Recommendations





Business Problem

- New Trial Membership Program
- Recommendations lead to Retention
- Residual Benefit to Existing Customers



Data - MovieLens

100,000 ratings

9000 movies

600 users



Singular Value Decomposition Model

Example:

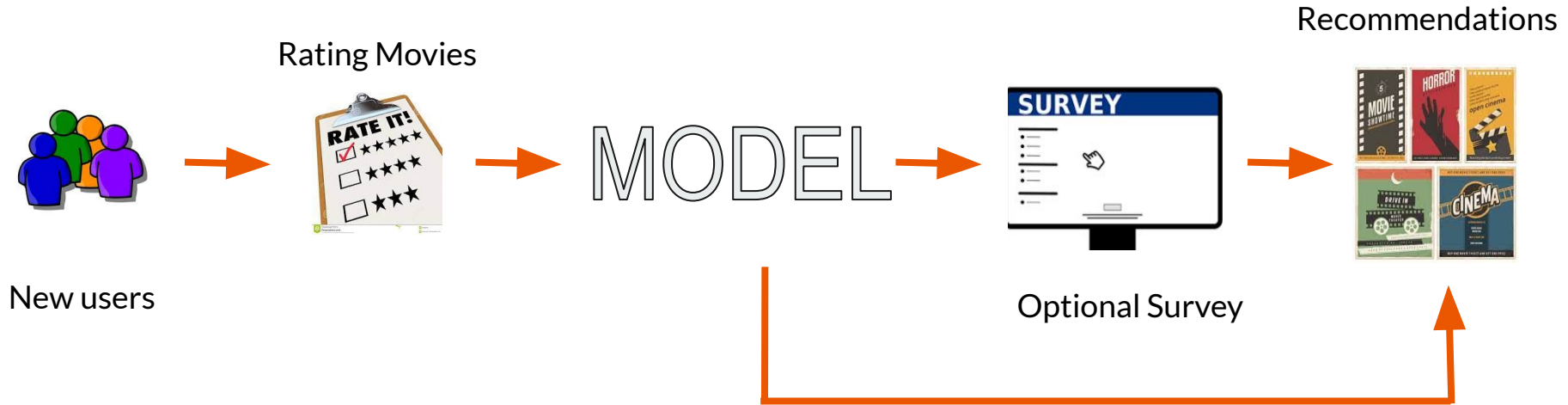
User 6 will most likely enjoy Movie A because of User 5.

Model RMSE: 0.860

	movie A	movie B	movie C	movie D
user 1	3		5	5
user 2	3	1	5	
user 3	4		4	
user 4	1		2	5
user 5	5		1	2
user 6			1	2



Recommendation System





Sample Recommendations

STANDARD RECOMENDATIONS

Title: Billabong Odyssey (2003)
Genre: Documentary
Projected Rating: 4.5

Title: How the Grinch Stole Christmas! (1966)
Genre: Animation|Comedy|Fantasy|Musical
Projected Rating: 4.5

Title: My Best Friend's Wedding (1997)
Genre: Comedy|Romance
Projected Rating: 4.5

Title: I Love Trouble (1994)
Genre: Action|Comedy
Projected Rating: 4.5

Title: Marat/Sade (1966)
Genre: Drama|Musical
Projected Rating: 4.4

YOUR CUSTOMIZED RECCOMENDATIONS

Title: Education, An (2009)
Genre: Drama|Romance
Projected Rating: 4.2

Title: Despicable Me (2010)
Genre: Animation|Children|Comedy|Crime
Projected Rating: 4.2

Title: White Ribbon, The (Das weiße Band) (2009)
Genre: Drama|Mystery
Projected Rating: 4.2

Title: Pirate Radio (2009)
Genre: Comedy|Drama
Projected Rating: 4.2

Title: Gamer (2009)
Genre: Action|Sci-Fi|Thriller
Projected Rating: 4.2



Recommendations / Next Steps

- * Develop plan to encourage users to rate more movies.
- * Create new models using user demographics.
- * Explore Movie Script Natural Language Processing(NLP)



Conclusion

Customized Recommendations

- SVD Model
- New Users Rate Movies
- Optional Survey



Questions



ceflynn@gmail.com