Hybrid Model 4

Model architecture :

1- Model architecture : Clusterig to ratings 5, choose 5 random sample in data which entered userId and founded him/her cluster number.

2- Recommend 6 movies via content based model for per those movies

3- Now we have 30 movies. Predict their ratings according to entered userId with SVDpp model. Sort them according to thir ratings. And recommend to user 10 movies.

Results;

- Customer watched and gave 5 ratings old films(before 2000s) generally and model recommended to before 2000s movies
- Customer gave 5 ratings The 39 Steps and model recomended Frozen Days, Pistol Whipepd. Two of them old film and have similar subject. (the blame is on someone and they are trying to solve this situation , mystery)
- Customer gave 5 ratings Godzilla, Pirates of the Carriban, Solaris, model recomended Aladin , Magic Man
- Customer gave 5 ratiings action crime movies and model recommended action, crime movies.

Hybrid Model 3

Model architecture :

1- Predict all movies and give 5 movie recommendation for per users which they did not watch before
2- Recommend 2 movies for per movies via content basedmodel which for entered userıd . Recommend movies to user total 10.

Results;

- Model recommended drama horror despite of user did not watched
- User watched Drama and comedy movies generally and model recomended to him mostly drama and comedy. But user watched so many action movies , model did not recommend
- User watched drama about war, crime and like that, but model recommend drama about comedy, fun and love.
- Hybrid Model 3 not better than hybrid 4

Hybrid Model 2

Model architecture :

1- Chose ratings==5 from data and select 5 sample movies for entered userıd
2- Recommend 2 movies for per chosed movies via content based model

Results;

- User watched mostly drama movies and model recommend drama movies mostly but subjects are so different.
- User watched action, crimes genres about adventure, fun comedy , model recommend actions but different subjects such as war, history and horror.
- Hybrid model 4 still best

Hybrid Model 1

Model architecture :

1- Choose data ratings==5.
2- Take 5 sample movies for user which defined userıd
3- Recommend 10 movies to user via content based model.

Results:

- User watched Godzilla, Pirates of Caribbean , Terminator and model recommended Star wars, jurassice park
- User watched carry on Doctor, the out of Towners and model recommend Night Shift, the golden child, I got The Hook-Up. All films are about something going bad wrong and characters rescue from this situation
- There is no time difference between Watched movies and recommended movies
- This model also good. Model 1 is comparable to model 4