

Topics: Collaborative filtering

Predict hidden ratings of users on the item. Performance will be measured in RMSE.

1. Dataset:

- a. Given dataset contains ratings of 943 users on 1682 items. User IDs and item IDs are numbered consecutively from 1. Timestamp is Unix time format
- b. Data file description
 - i. **ee412.train**: training dataset. Each line consists of
<user_id><tab><item_id><tab><ratings><tab><timestamp>
 - ii. **ee412.testset.csv**: test dataset. Each line of test set consists of
<user_id><comma><item_id><comma><timestamp>.

So you should submit your rating predictions for each user_id and item_id pair on ee412.testset.csv.

Submission result file format should be

<user_id><comma><item_id><comma><ratings>

Your result do not need to be sorted in user_id or item_id, just use same order in ee412.testset.csv

(For example, first and second line of ee412.testset.csv is

```
1      1028  879541148
194    54    879525876
```

, so you should write

1,1028,<your_prediction>

194,54,<your_prediction>

...

on your result file.)

2. Submission:

Submission file should be named as [student_id].zip

It must include:

- Source code
 - o You can use Matlab or Python
 - o You may use some toolbox for common operation, but your algorithm should be implemented by on your own.
 - o Training code (code for making your model)
 - o Evaluation code (code for making your result txt file)
- Documentation
 - o Explain your method
 - o Explain about your implementation
 - o Explain how to run your code
 - o Discussion/Analysis about your model
 - o Reference if you have any
 - o Documentation file name is doc_[student_id].[pdf/docx/txt] (plz, no hwp)
- Result file
 - o **Your result file should follow the format described in 1. Dataset**
 - o Result file name is result_[student_id].txt

3. Evaluation

- a. Accuracy (measured in RMSE) 40%
- b. Novelty (you should explain in your documentation) 50%
- c. Documentation 10%

4. Contact

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