UE Learning from User-generated Data S2022
Session 6: MRS Challenge Sync

Oleg Lesota (**oleg.lesota@jku.at)**

Agenda

- Intermediate Results
- Questions
- Ideas

Intermediate results

- Going to be published regularly on moodle
- Current state:

participant	ndcg
TopPop	0.038
kXXXXXXXX	0.001

Questions so far?

Ideas

1. POP + demographic filtering

   Assumption:

   • Users with similar demographics (age, country, gender) have similar tastes;
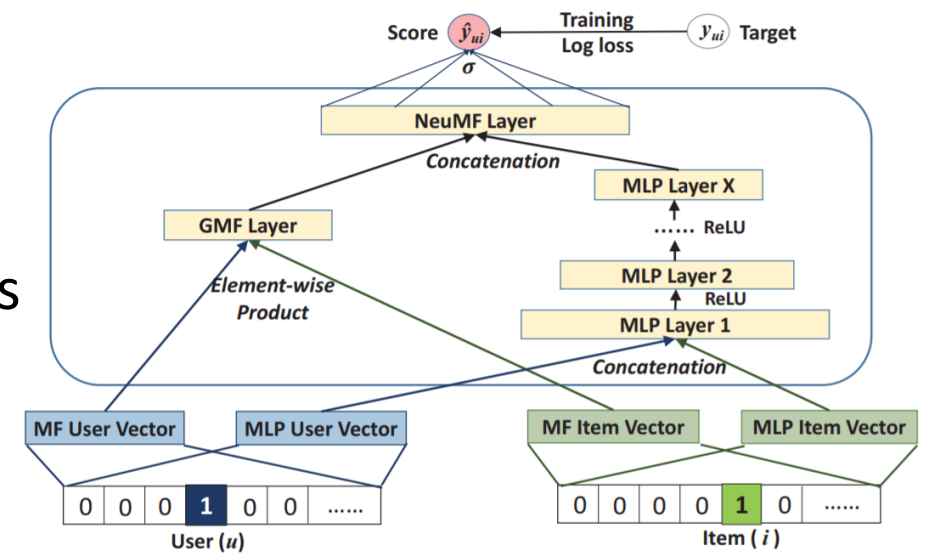
2. ItemKNN

   • Solid choice for LFM-2b

   • Requires optimization

3. POP + filtering by preference

   • Use more sophisticated ways to cluster users

4. Explore Neural Matrix Factorization

5. …

Xiangnan He, Lizi Liao, Hanwang Zhang, Liqiang Nie, Xia Hu, and Tat-Seng Chua. 2017. Neural Collaborative Filtering. In Proceedings of the 26th International Conference on World Wide Web (WWW '17).

Important Notes

- Tune your hyper-parameters!

- Use multiple data samples!

- Compare your implementations to baselines!

Submission – Two files

- rec_<matr.num.>_<name>**.tsv** – the file with your recommendations, where each line corresponds to one target user:

<**user_id**>**\t**<**item_id**>,<**item_id**>,…

15 not seen items for each user (no spaces between), example:

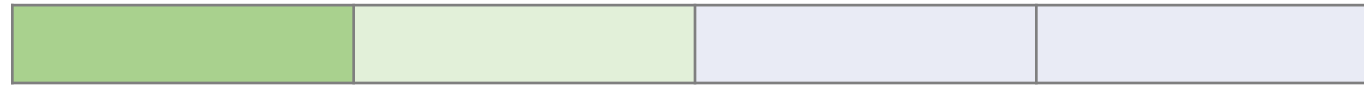| rec_k00000007_Bond_James**.tsv** |
|---|
| 0   0,1,2,3,4,5,6,7,8,9,10,11,12,13,14 |
| 7   15,1,2,3,4,5,6,7,8,9,10,11,12,13,14 |
| 9   4,15,1,2,3,5,6,7,8,9,10,11,12,13,0 |
| … |

- report _<matr.num.> _<name>**.txt** – text file describing your approach to the recommendation part of the task: algorithms used, training settings, … No more than ½ A4; Specify your name and matr. number within as well.

Evaluation

- The results will be judged by **overall nDCG** performance

- Additional points will be awarded for fairness of the recommendation

- Works outperforming demographic POP recommender will get score of 0.5 out of 1

- Further points will be awarded based on the gap between the solution and POP recommender. Better performance -> More points

Timing

- Challenge publication: 11.05.22

- Deadline: 14.06.2021

Thank you!