

Evaluation of user-based vs. item-based filtering for an anime recommendation system

Date: *12 April 2019*

Course: *Information retrieval (LIX018B05)*

Group members: *Travis Hammond (S2880024)*
Louis de Bruijn (S2726327)
Jonas Schuitemaker (S2698617)
Jasper Bultman (S3196763)

Table of contents

| | |
|---------------------------------|----------|
| Problem Statement | 3 |
| Literary background | 3 |
| Experiments | 3 |
| Results | 3 |
| Individual contributions | 4 |
| References | 5 |

Problem Statement

We researched the recommendation of anime TV shows based on the ratings given to them by users (=viewers) who have watched them. This genre of TV shows typically have a smaller, hence less mainstream, but more dedicated audience [5] which might lead to more high quality ratings and thus a more high quality accuracy for the recommendation system. By high quality ratings I mean that enthusiastic viewers are more likely to be knowledgeable about the fine grained details that differentiate good and bad shows from the perspective of another viewer.

My goal is to find the recommender system approach that works best, in that it produces the highest accuracy for the data-set available at the popular dataset hosting website Kaggle, making my research question: "Which recommender system achieves the highest accuracy in recommending anime TV shows to users based on the data-set available".

Literary background

Material

Methodology

Implementation

Experiments

Results

Individual contributions

References

1. CooperUnion. Anime Recommendations Database. Dec. 2016. url: <https://www.kaggle.com/CooperUnion/anime-recommendations-database>.
2. Jurij Leskovec, Anand Rajaraman, and Jeffrey David. Ullman. Mining of massive datasets. Cambridge University Press, 2016.
3. MyAnimeList. Mar. 2019. url: <https://en.wikipedia.org/wiki/MyAnimeList>.
4. Recommender system. Mar. 2019. url: https://en.wikipedia.org/wiki/Recommender_system#Hybrid_recommender_systems.
5. Stephen Reysen et al. “An Examination of Anime Fan Stereotypes”. In: The Phoenix Papers 2 (Apr. 2016), pp. 90–117.