

CS6120 Lab 3

25/1/08

This lab is about the Precision/Recall measures for assessing retrieval effectiveness and Custom search engines.

Part 1. Calculating Precision/Recall of a recommender system

1. Go to www.movielen.org and join as a new member. There's no need to provide your real name or real email address if you don't want to.
2. Rate at least 15 movies, as requested.
3. Play around for a bit. Discover its features.
4. Rate a few more movies. You can do this either as you play around with the system, or by clicking *Sortcuts* and *Rate Random Movies*.
5. Click the *Search* tab. Uncheck *Exclude your ratings*. Click the *Search* button. Pages of predictions will appear, but it will include movies that you rated as well as movies you didn't.
6. Compute the following:
 - o $p1$ = number of movies in the first page that you rated / number of movies in the first page
 - o $r1$ = number of movies in the first page that you rated / number of movies you rated in total
7. Look up the definitions of *precision* and *recall* from Lecture 3. Do $p1$ and $r1$ approximate precision and recall, respectively?
8. Click the *Search* tab. Check *Exclude your ratings*. Click the *Search* button. Pages of predictions will appear, but only for movies that you have not yet rated.
9. Count up the number of movies in the first page that you have seen and liked. If this is zero, then go back to step 4! Otherwise, compute the following:
 - o $p2$ = number of movies in the first page that you have both seen and liked / number of movies in the first page
 - o $r2$ = number of movies in the first page that you have both seen and liked / number of movies you have both seen and liked that are displayed in the first five pages
10. Do $p2$ and $r2$ approximate precision and recall, respectively?

Part 2 (Optional). Custom Search Engine Exercise

1. Read about Google Custom Search here: <http://www.google.com/coop/cse/>
2. Play with a couple of examples:
 - <http://code.google.com/edu/curriculumsearch/>
 - <http://www.realclimate.org>
3. Create your own Google Custom Search engine in a field of interest to you.
 - Click create button here <http://www.google.com/coop/cse/>
 - Provide engine name, description and language

- You will need to create a Google account, e.g. Gmail account, if you don't have one.
- Specify keywords that describe the subject area of your custom search engine
- Specify a list of web sites to search
- Read TOS
- Enjoy!