

## Machine Learning 202

### Homework 1

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- 1) Use the Microsoft Web Hit Data. Pick a particular person that visited several pages. Delete a few pages that they visited. Do a query of the recommender system to see if the recommender will give back the pages that were deleted.
- 2) Discuss various approaches to problem 1
- 3) Create an item - item collaborative filter. Pick out a web page and find the ten other pages that are most similar to it. Do this once for each of the three similarity measures: Pearson correlation, Jaccard, and Cosine measure. Do these ten pages change with the choice of similarity measure?
- 4) Create a user - user collaborative filter. Pick out a user and find the ten other users that are most similar to it. Do this once for each of the three similarity measures: Pearson correlation, Jaccard, and Cosine measure. Do the ten closest users change with the choice of similarity measure?