## CS380 Information Retrieval

#### HW 3

## Written and Oral report guidelines

#### WRITTEN REPORT

Due March 16, in class

1 report per team (be sure to list all team members in report) Length: 3-10 pages. This will vary depending on presence of tables, etc. I do not expect that the textual will exceed 2000 words (but if you find that the report is longer, that is OK). That said, avoid writing "War and Peace"

This report should follow the general format of a scholarly research paper. As such it might be expected to have some or all of the following sections:

1. Introduction/Background: what is the problem, why is the problem a problem?

1 - 2 paragraphs

2. Previous Work: What have other people done on this problem. For some projects, the textbook will be a significant help. (Also the secondary text has some sections that apply directly.) If you have chosen to implement and test a technique proposed in another paper, some discussion of why that paper (google scholar will help with these sort of questions). If you are working an algorithm that proposes to fix an issue in another algorithm, you should discuss the problematic algorithm. (Although you could choose to put such discussion into the Introduction.) You need not cover any previous work already discussed in class.

1-2 paragraphs

3. Algorithm: The algorithm you implemented at a very high level. If there is pseudocode, it should be very pseudo. Here describe all design decisions you made, the effect of those decisions, and a prima facie case for why those decisions are reasonable.

For instance, "To reduce the complexity of the problem, I randomly excluded 75% of the vocabulary. This increased the speed of the retrieval by a factor of 16. The decision is reasonable because most words do not matter that much." While this example covers each of the points I suggested, it is very brief and the prima facie case is weak, at best.

To the extent that you made decisions, you will probably need some supporting experimental evidence of their validity in the remainder of the paper

If your method used software that you did not write, it should probably be mentioned here. (And certainly should be mentioned somewhere.)

As long as it needs to be, This could be as much as 2/3 of the paper.

- 4. Methodology: How you when about testing you system. For many this will be fairly short as you testing will be along the lines of "here are a set of queries ...". If that is the case, in this section you should discuss how you came up with the set of testing queries. For others this section might be omitted as the statement "I looked for interesting before / after differences" is quite boring. 0-2 paragraphs
- 5. Results/Analysis: What you get when you apply your testing methodology to your algorithm. For some this will look similar to the annotated script from HW2. Realistically, this is the meat of the paper. Of indeterminate length. If you are annotating scripts, then this could be quite long.
- 6. Conclusions: Did the system do what you expected? Did it work? What you did going forward.

# ORAL REPORT

## 10-15 minutes

1-2 slides per section of the written report. For most presentations you can omit the related work. (At most you might mention related work in the algorithm (or results) discussion. For instance, "XXX did this instead.") The report should focus on the algorithm you implemented and how it works. Keep in mind that for oral presentation your discussion of the algorithm must be very simple, tending towards diagrams with circles and arrows. Results should be very carefully chosen to illustrate specific pointss. Inevitably you will need to NOT discuss a lot of interesting things in your report. Do not try to get everything in by just talking very fast.