## Computer Engineering Department Bilkent University

CS533 Fall 2018 Midterm Exam Study Guide November 15, 2018

## A. Exam Structure - Time Schedule & Other Information

- 1. Mostly problem solving type questions. No. of questions: 7-8 (approx.).
- 2. Closed everything exam.
- 3. Exam may involve simple calculations. You may bring a simple calculator. You cannot share calculators and are not allowed to use your cellular phones.
- 4. Exam Time (Thursday, November 22, 2018) 15:40 17:15
- 5. Note that we have a mock midterm exam available on our course web site.
- 6. Don't miss the class notes on our course web site.

## B. Subjects to be included (an incomplete list)

- 1. No need to memorize the formulas (most of them will be provided: CC and similarity formulas; you have to know recall and precision by hard).
- 2. Similarity calculations for inverted files.
- 3. Inverted file concepts incluZobel-Moffat paper from *ACM Computing Surveys*: Inverted Indexes for Search Engines.
- 4. Evaluation of IR systems.
- 5. Clustering concepts.
- 6. Clustering algorithms: heuristic ... complete link.
- 7. Cover coefficient based methodology, C<sup>3</sup>M.
- 8. Cluster validation: Yao's formula, Rand index.
- 9. Maximal marginal relevance.
- 10. Data fusion: Reciprocal rank, Borda Count, Condorcet.
- 11. Stemming.
- 12. Please also consider the papers that you have read for solving the assignment no. 1 and 2 questions. About 15 points for this part.

Subjects beginning with term weighting topic and beyond are not included, like Salton-Buckley classic term weighting paper, TDV concept, PAT tress, Signature Files.