Computer Engineering Department Bilkent University

CS533 Fall 2019

Term Project Timeline

Initial Version of this Document: October 17, 2019 - 5:36 pm

Date of Last Update: November 29, 2019.

October 25, 2019; Friday: Partners - Declare your partners and tentative project topic. About: three students/group. Exceptions, with justification, are possible. On the due date October 25 please send an email with the subject "CS533: Project partners and topic" by 5:00 pm.

November 5, 2019; Tuesday: Proposal - One to two page project plan which involves a) title and description of the problem, b) motivation/importance, c) methodology, d) expected results, e) references. I understand that as the project progresses there can be deviations from this preliminary description. Leave a hardcopy in my mailbox and send an email with the subject "CS533: Short project description" both by 5:00 pm on the same day.

November 19, 2019; Tuesday: Proposal Group Presentation - Five minute in class Power Point presentation a) description of the problem, b) motivation/importance, c) methodology, d) expected results (tentative) Bring a handout to the classroom. Attandance is mandatory. Send an email before the class with the subject "CS533: Project 5 minute presentation" your presentation in pdf form attached.

December 3, 2019, December 10, 2019 Tuesday, class time: Interim Report - A short manuscript in the form of ACM Conference poster papers (http://www.acm.org/publications/proceedings-template-16dec2016, ~2 pages): more detailed form of the items defined in your proposal and your progress so far. Make sure that it has an appealing and truthful title, abstract, keywords, ACM categories, introduction, ... references. Send a copy by email before the class with the subject "CS533: Interim Report" and bring a hardcopy to the classroom.

December 24, 2019; Tuesday: Project Group Presentation (10 minutes/presentation, please bring a handout to the classroom). There will be a peer evaluation for each project presentation. Attendance is mandatory. Send a copy by email before the class with the subject "CS533: Project presentation" and bring a handout to the classroom as you did in five minute presentations.

January 7, 2020, Tuesday by noon time: Final Project Report in the form of ACM conference papers (~8 pages). It involves submission of the developed programs with a short report for the programs (their structure, etc.). No need to exaggerate, a short program report is enough. You may be required to do a demo. Send an email with the necessary attachments "CS533: Project material". Zip the program and the related files. Send the report in pdf form without zipping. Leave a hardcopy of your report in my mail box by noon time.

Deadlines: If you miss a deadline some points will be taken off from your project grade.

Presentations: You cannot miss presentations, some points will be taken off from your project grade if you miss any presentation. In your presentation please number your slides in the form of slide no./last slide no., have a table of at the beginning contents, and conclusion at the end, and list of references. In your papers and presentations say what you will say, say what you want to say, and say what you said.

Tentative Project Topics:

- 1. using clustering for anomaly detection,
- 2. analyzing Turkish and English summaries of TÜBİTAK projects to see correspondence of documents
- 3. sentiment analysis in novels such as \ddot{U}_{ζ} *İstanbul* by Cevat Fehmi Başku,
- 4. stance detection,
- 5. fake news identification (related to stance detection),
- 6. tweet normalization: spelling correction and mapping abbreviations to complete phrases and words,
- 7. community detection (emotional, political, sentiment, celebrity, event, etc.),
- 8. identifying identical users with different user names in twitter,
- 9. friend recommendation,
- 10. identifying fake users in twitter,
- 11. identifying rumors, fake news etc. in twitter.

Essential Components of Projects: Measuring the effectiveness of your approach and comparing it with baseline(s), or comparing the performance of your approach with various parameters. Statistical test to show the significance of your results is especially desirable. We would like to have language-independent method and include Turkish/Turkey in the experiments. Remember the essential keywords of successful research: scalable, dynamic, robust (remember the Turkish word SeDiR). For good writing suggestions such as the use of simple past and present time see *Writing for CS* by J. Zobel.

Recommended Reading: Claude E. Shannon, Creative Thinking. March 20, 1952. http://www.cs.bilkent.edu.tr/~canf/CS533/claude-shannon-creative-thinking.pdf

Update Notes

October 17, 2019 - 5:37 pm: No update yet.