ML Journal Club Recommendations

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1 GOALS

Currently, the objectives of ML Journal Club are not well defined. It is unclear what students are supposed to gain from taking ML Journal Club. In addition, there is nothing written in the handbook or the website explaining the purpose of ML Journal besides being a requirement and a place to give your Speaking Skills and DAP presentations.

We suggest that we define the goal of ML Journal Club as the following:

• To improve communication skills in all aspects that are important for an academic career including teaching, giving research talks, presenting posters, and making short elevator pitches.

2 NEW COURSE ADDITIONS

Currently in Journal Club, we only practice giving a short research talk (5 min) and a long research talk (30 min). However, there are other styles of talks we should learn including how to give a clear and effective recitation or lecture. In addition to providing the opportunity to improve their teaching skills, we believe that this will also be more interesting and fruitful for the audience since they will gain a broader understanding of a machine learning topic. This is different from research talks where only the specifics of one person’s research problem are covered.

We propose the following additions:
2.1 Poster Presentation

This would be intended to fill a 15 minute slot. The student would present a poster for 5 minutes and then would get 10 minutes of feedback from the audience. The feedback may include stylistic comments about the poster or comments about how it was presented.

2.2 Recitation

This would take 30 minutes. The student would present a 30 minute recitation on a basic machine learning topic as such would be presented in an actual recitation from a course. This would be followed by feedback from the audience. This would be a great opportunity for students to present on the blackboard (or whiteboard). Since an increasing number of presentations are done with slides, it is difficult to have the chance to practice presenting on the blackboard, which many people feel is a better way to communicate technical ideas.

2.3 Lecture

This would also be a 30 minute presentation. It is different from the recitation in that you would present more advanced material and you can cover it more quickly.

3 New ML Journal Club Format

Because we require students to take the ML Journal Club twice during their PhD, it should be a useful, interactive, and productive experience. Currently, we require students to attend what often is a session that is not engaging and not a productive use of time (both student and faculty). We propose a new format that is intended to improve the Journal Club's experience in the following aspects:

• Allow students to practice different avenues of communicating technical ideas and methodology.

• Improve the overall interaction and engagement of students by requiring them to attend only course-related sessions (NOT Speaking Skills or DAP).

3.1 Scheduling

We propose that ML Journal Club be offered only once per year, and only in second semester. The course is very sparsely populated especially in first semester which reduces the interaction between students and the amount of feedback one can receive. In addition, it is not a productive use of faculty time to host a course for an average of 5 students. If it is offered once a year, then all the students who intend on taking it that year will collect and there will be around 10-12 students in the course. We recommend that it is offered in 2nd semester because there is more time (15 weeks as opposed to 14) and also because most students take
Currently, there are two slots per week for Journal Club, Tuesdays and Thursdays. We recommend that we designate the Tuesday slot for the course, and the Thursday slot for Speaking Skills/DAP presentations. That would leave 15 x 1-hour sessions for the course. Per class, we can have 4 x 5 minute talks (poster and elevator pitch), 2 x 30 minute talks (recitation, lecture or research talk), or 2 x 5 minute talks and a 30 minute talk. Thus, we would have more than enough time for each person to get a 1 x 15 minute slot for the short talk options and a 1 x 30 minute slot for the longer talk options.

In addition, if students want to complete their Speaking Skills/DAP requirements in the Fall semester, then they can still do so in the ML Journal Club Tuesday or Thursday slot but they would schedule that with the committee. It is our intention to separate these requirements from the ML Journal Club course.

3.2 Requirements

As before, each student must take the course twice during their PhD. Each time they take it, they should complete a 5-minute option (poster or elevator pitch) and a 30-minute option (recitation/lecture/research talk) and they must do different options each time.

We recommend that it be compulsory for students to attend the course which is Tuesdays. However, we believe that it should be optional to attend the Thursday Speaking Skills/DAP presentations. The reason is that these sessions are not very interactive or productive for the students in the audience. In a Speaking Skills/DAP session, the speaker presents, the committee then asks questions and then the audience must leave for the committee to discuss the presentation. Thus, these sessions are not engaging the students in the course, or contributing to completing the goals of this course.

4 Conclusion

We hope that by offering the opportunity for students to practice a variety of talk styles and making the class more engaging, students will find the experience more productive maybe even enjoyable.