

CSC303: Critical Review Assignment

Group & Choice of Paper due Fri March 1, 11:59pm

Draft of Report due Fri March 22, 11:59pm

Peer Review of another Group's Draft due Fri March 29, 11:59pm

Final Report due April 4, 11:59pm

For this assignment, you'll be working in groups of 3-4 to find and review a paper related to the course. Note that the paper must be recent (i.e. published on or after January 1st 2021), and must be either published in a journal/conference, or have been accepted to be published in a journal/conference. In other words, no arXiv preprints unless they are/will be published in a journal/conference.

I must approve your group's choice of paper in advance! This is critical to ensure that each group is doing a different paper. Failure to get your paper approved risks a mark of zero. Email me your group and choice of paper by March 1 at the latest. The 303 instructor email address is on the Quercus homepage.

Once your choice of paper is approved, you have until March 22 to write a draft report. This draft will not be graded; instead it will be circulated to some of your peers for peer review. Each individual student will receive another group's draft report, and have until March 29 to write a short peer review (4-5 sentences is sufficient). Each group will then have until April 4 to make any revisions to their report based on the peer review. This report submitted on April 4 is then graded by the TA.

As another group may have already taken your proposed paper, you have the option of emailing me a *sorted* list of possible papers. In this case, I will tell you the first paper on your list (if any) that is still available, and I will reserve it for your group.

I am putting an upper limit of 5 pages (excluding bibliography if included), but you are otherwise free to make your critical review as long or as short as you feel is appropriate to properly meet the requirements below. I have provided two examples of good reviews submitted in previous years. The two exemplars are around 1000 words, so it's reasonable to aim for around that length or a bit longer.

These reviews had *excellent* critiques, although the second example could have been improved with a clearer summary and explanation of new terms (e.g. key-opinion leader). Hence it would have been well-served to be a bit longer. The first review in particular went above and beyond in their critique by referring to a second paper that should have been mentioned in the literature review, and further tying this work into potential future work.

Note1: As with the assignments, *the names of all group members should only appear on a new, otherwise blank page, after the end of the report.* Again, this is part of an effort against unconscious bias in grading.

Note 2: Your draft report submission & the peer review you submit, and the peer feedback you receive are all via the Quercus assignment which will redirect you to the peerScholar tool. The final report due on April 4th will be submitted via MarkUs.

Note3: You must join a group on both peerScholar (for the draft report), and MarkUs (for the final submission)

| | 0-50% | 50-69% | 70-79% | 80-100% |
|---|--|---|--|---|
| <p>Organization (10 points)</p> <p>Work flows logically, does not jump back and forth between ideas.</p> | Contains many non-sequitors, or much jumping back and forth between ideas, or otherwise makes it difficult to follow the review. | Contains some non-sequitors, jumping back and forth between ideas, or other features that make it difficult to follow the work. | For the most part the work moves logically and smoothly. Some exceptions or areas for improvement. | Work moves logically and smoothly from point to point. |
| <p>Readability (10 points)</p> <p>Writing style, grammar, clarity.</p> | Many major issues with style, grammar, or clarity of explanations or ideas. | Major issues with style, grammar, or clarity of explanations or ideas. | Minor issues with style, grammar, or clarity of explanations or ideas. | Formal style, good grammar, clearly expresses ideas. |
| <p>Intended Audience (10 points)</p> <p>Assumes reader is technically knowledgeable, but not familiar with this specific topic. Defines any new terms that are not from class.</p> | Doesn't explain new concepts, or assumes zero knowledge on the part of the reader. | Important concepts unclear, or considerable time dedicated to elementary topics. | Some minor oversights such as forgetting to introduce a minor term. | Clearly and concisely introduces new concepts (using concepts from class where possible), doesn't re-introduce course material. |
| <p>Summary (20 points)</p> <p><u>Criteria:</u></p> <p>1) Identifies main claim/goal of the paper. 2) Outlines motivation if provided. 3) Briefly explains methodology. 4) Outlines key results</p> | More than two of the criteria to the left are either missing or deviate from the paper. | One or two of the criteria to the left are missing or deviate from the paper. | Meets all criteria with some minor opportunities for improvement ¹ | Meets all criteria clearly and concisely. |

1 As a simplified example, for motivation it could be the difference between “the authors seek to find edges strength to aid link recommender systems...” vs. “the authors seek to find edges strength to improve link recommender systems. Specifically, they try to leverage structural knowledge because previous approaches have relied only on the similarity of individuals...”.

| | | | | |
|--|--|--|--|---|
| <p>Critique (40 points)</p> <p><u>Criteria:</u></p> <p>1) Explains relation to class material; ideally compares & contrasts</p> <p>2) Discusses possibilities for future work or other applications that are not in the paper</p> <p>3) Describes if aspects of the paper were particularly clear or unclear</p> <p>4) Includes both positives and negatives</p> <p>These points must be done in a way that demonstrates an understanding of the paper and the related course materials.</p> | <p>Missing any positive points about the paper, or missing any negative points about the paper, or missing at least 2 of the criteria to the left.</p> | <p>Includes both positive and negative aspects. The criteria are met, but not in a way that demonstrates understanding of the material (e.g. the possible future work is unrelated to the paper, or copied verbatim from the paper).</p> | <p>Includes both positive and negative aspects. Good, but could be better (e.g. one of the criteria is met, but is a bit shallow).</p> | <p>Includes both positive and negative aspects. Meaningfully includes all of the criteria (e.g. referring to course material, future work, etc...). Optionally goes beyond criteria 1-3 in the analysis, demonstrating understanding of the paper and critical thought.</p> |
| <p>Conclusion (10 points)</p> <p>Provides a final verdict on the paper, be it a rating (e.g. 4/5), or a written verdict (e.g. "They provided a clear characterization of the activity networks from a high-level view"). Reasons for the verdict are provided. Reasons describe various aspects of the paper (e.g. methodology, clarity of the writing, any unique or novel aspects, etc...).</p> | <p>Missing, or doesn't include a verdict on the paper.</p> | <p>Verdict either doesn't follow from the paper, or is not supported by the reasons provided.</p> | <p>Provides a verdict along with supporting reasons. Some minor issues (e.g. slight disagreement between conclusion and body).</p> | <p>Clear, concise, provides supporting reasons from the rest of the report. Ties the review together.</p> |

| | | |
|---|--|---|
| <p>Peer Review (1 point)</p> <p>Each student's peer review is graded on an individual basis.</p> <p>Students' peer review should briefly state their opinions on whether they were able to follow the summary, as well as their thoughts on the critique.</p> <p>The peer review need only be 4-5 sentences, but can be longer.</p> | <p>0 points</p> <p>Peer review either not submitted, very superficial, or is missing commentary on either the summarization of the paper, or on the critique of the paper.</p> | <p>1 point</p> <p>Peer review covers both the summarization of the paper, and the critique of the paper. Critique is clearly specific to the report, and addresses some specific points of the report. This could be either saying what worked well, or what could be improved.</p> |
|---|--|---|