

Guidelines for Writing a Paper Review

Throughout the semester, we will have paper readings that dive into more advanced research related to course material. If you are in a graduate section of 433/422, you will be required to submit four paper reviews (one per set), selected from a list on the course website. Please put together a short writeup and submit it to Gradescope. The writeup should consist of the following sections:

1. Paper Title, Authors, and Conference/Journal

2. Brief Summary

- Limit this to 1–2 paragraphs.
- What is the problem the paper is trying to solve?
- What are the key ideas of the paper? Key insights?
- What is the key contribution to literature at the time it was written?
- What are the most important things you take out of it?

3. Strengths

- 3–5 bullet points. List only the most important ones, but at least 3 are required.
- Does the paper solve the problem well?
- These should be about technical aspects. At most one (ideally none) about the writing or diagrams.

4. Weaknesses

- 3–5 bullet points. List only the most important ones, but at least 3 are required.
- This is where you should **think critically**. Every paper/idea has a weakness. This does not mean that the paper is necessarily bad (though maybe some will be), but that there is room for improvement and future research can accomplish this.
- These should be about technical aspects. At most one (ideally none) about the writing or diagrams.

5. Extensions and New Ideas

- 1–2 extensions or new ideas, one paragraph each.
- Be creative. Is there some new insight that you might be able to explore? Can you do better than what they've proposed? Can you use their idea to solve a different problem? Use any inspiration from the paper to think about what you could do, and briefly explain what value this adds to the literature.
- You can use your weaknesses for inspiration on what to fix, but you don't have to.

Based on Onur Mutlu's Guidelines on Paper Reviews, Spring 2015, available at <http://course.ece.cmu.edu/~ece447/s15/lib/exe/fetch.php?media=onur-447-s15-how-to-do-the-paper-reviews.pdf>