

Team Name: Final Report

CSE 481N

List Authors Here

Spring 2024

Abstract

Write this last. Include the key message of the document, distilled into one paragraph. This is not a summary of what you did; it's a summary that helps a reader decide whether to keep reading. For this report, it makes sense to include a statement that this is a capstone class project, to give some context.

1 Introduction and Motivation

Here is the problem we want to solve, why that problem is important (and to whom), and (at a high level) here is how we solve it. Consider, for example, public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors and impacts of the resulting technology in these contexts. This is also where you mention the most important related work, to help the reader locate the paper relative to the existing literature. The most important related ideas that you build on should be cited here. In some cases, a roadmap is a good way to close this section.

1.1 High-Level Advice

Assume your reader is intelligent and informed, but not necessarily an expert on the dataset, task, or problem you're working on. Try to empathize with your reader and think about how to help them understand. Your goal is not to impress the reader, but to make your ideas and argument clear to them.

1.2 Answers to Some Frequently Asked Questions

- Yes, you must use \LaTeX .
- Aim to be precise and concise. We expect most reports will be about six pages (not including references). Do not expect us to read anything past page 6.
- Do not tell the chronological story of your exploration this quarter; rather, think about what is most interesting to the reader. Your decisions about how you order different parts, and how much room you give to each one, signal to the reader what's more important.
- Negative and inconclusive results are reasonable to include, but be cautious about the conclusions you draw from them. If there are still more experiments required to discern the reason for an observed difference between methods, say so, and consider suggesting what experiments might help clarify the situation, even if you don't have time to do them.

2 Optional Section on Terminology and/or Notation

Retitle or delete this section as appropriate.

You'll likely use a command like `includegraphics` to include images here.

Figure 1: Consider using figures and tables to present information as clearly as possible.

You'll probably use a `tabular` environment here.

Table 1: Consider using figures and tables to present information as clearly as possible.

3 Technical Idea Section(s)

Exposition of the new idea(s), with detailed discussion of how each relates to past work. This is often the longest part of the paper, so you might want to break it into several sections, and include plenty of signposting so the reader doesn't get lost. This is where you will discuss as much related work as you can (without breaking the flow). You can also hint at future directions or explicitly leave open questions to future work, but use sparingly or the reader will get the impression that you're writing about work in progress. Think carefully about how to structure this section to make it easy to understand.

Consider using figures and tables to present information as clearly as possible.

Any time you include a figure or table, like Figure 1, make sure it's referenced in the text.

3.1 Subteam Effort [list name(s) here]

By default, your team will share the grade for this report. However, you may optionally label technical ideas sections or subsections with names of the people responsible for them (i.e., when it's a strict subset of the team).

4 Empirical Section(s)

These sections support the claims of the paper by presenting experiments or other data analysis. When these open new questions for future work, you can say that. Try to tease apart (1) the experimental design (including justification for why you're doing the comparisons you're doing—what is the question you want to answer with this experiment?), (2) details of the datasets and evaluation scores used in your paper, (3) the implementation details for the systems under consideration, (4) the results, and (5) the interpretation of those results. Often these get muddled up. In different situations, different orderings of (1-3) make sense. Separating (4) and (5) is especially important. A common pitfall is to present a large table of numbers without pointing out the most important things to observe in the table. Another common pitfall is to jump to broad conclusions based on observed differences in performance; be cautious about the conclusions that you draw.

Any time you include a figure or table, like Table 1, make sure it's referenced in the text.

4.1 Subteam Effort [list name(s) here]

By default, your team will share the grade for this report. However, you may optionally label empirical sections or subsections with names of the people responsible for them (i.e., when it's a strict subset of the team).

5 Related Work

Related work that didn't fit the flow of the paper earlier, but which you strategically want to mention, can be discussed in a short "related work" section near the end. I strongly advise against a related work section immediately after the introduction; that's like putting up a wall between your reader and the important new idea, but in some settings it may be necessary to situate the reader in some very closely related work so

your ideas make sense.

Make sure you understand the difference between citing work as a noun phrase (`citet`) and using a parenthetical (`citep`). The first one looks like Clark et al. [2018], and the second one is different [Lin et al., 2018].

6 Limitations

Discuss the limitations of your work.

7 Future Work

Discuss what future research in this direction could focus on.

8 Conclusion

A clear statement of what we know now that we have read this document, but didn't know before. This is not the place for future work or grand philosophical statements.

Acknowledgments

Acknowledge anyone who gave you helpful comments or suggestions, including your classmates and people outside the class who met with you about the project.

Put your bibtex references in a file called `refs.bib`. The citation to Press and Smith [2018] exemplifies the style I prefer for arXiv papers; when a paper has been published in a peer reviewed forum, cite that version instead of the arXiv version.

References

Elizabeth Clark, Anne Spencer Ross, Chenhao Tan, Yangfeng Ji, and Noah A. Smith. Creative writing with a machine in the loop: Case studies on slogans and stories. In *Proceedings of the Conference on Intelligent User Interfaces*, Tokyo, Japan, March 2018. URL <http://homes.cs.washington.edu/~nasmith/papers/clark+ross+tan+ji+smith.iui18.pdf>.

Lucy H. Lin, Scott B. Miles, and Noah A. Smith. Natural language processing for analyzing disaster recovery trends expressed in large text corpora. In *IEEE Global Humanitarian Technology Conference*, San Jose, California, October 2018. URL <https://homes.cs.washington.edu/~nasmith/papers/lin+miles+smith.ghetc18.pdf>.

Ofir Press and Noah A. Smith. You may not need attention, October 2018. URL <https://arxiv.org/pdf/1810.13409>.

A Example Appendix Section

A.1 Example Appendix Subsection

For completeness, you may optionally include appendices, but don't expect us to read them. Make sure the main body of your paper is complete and meets the rubric requirements on its own. For example, you might show a table of results for a main experiment in your paper, and put tables for additional experiments in an appendix. But you should still qualitatively and comprehensively report on all results that you intend to include in your paper, e.g., "a similar trend holds for the other datasets (full results in §A.1)."

Appendices must be well-organized: separate appendices (with descriptive titles) should be created for separate topics or datasets, and be properly grouped and numbered (e.g., A.1, A.2, A.3, B.1, B.2...). When you reference an appendix, it should be clear what it's about, and you should link to it (e.g., "detailed prompts can be found in §B.1").

A.2 Example Appendix Subsection

B Example Appendix Section

B.1 Example Appendix Subsection