

## CS 295: Statistical NLP: Winter 2018

# Project Report

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As the fourth (and final!) submission for your course project, you will be submitting the project *report*. Each project report (one per group) will be a **maximum 6 pages, not including references** PDF write-up, in ACL format, uploaded to Canvas by **March 23, 2018**. This page limit is strict, you will be deducted points if you do not meet this requirement. You can include supplementary materials, like extra tables, figures, and plots as appendix to the report, but note that they may not be considered for grading.

## Project Report

The project report is intended to be a high-quality, paper-like write-up of your project, including complete description of the problem setup, novelty of the approach, evaluation criteria, and study of relevant related literature, and a description of the results. The final report should be structured similar to the project status report, with polished writing and the results of evaluation. Here are the sections I anticipate you to have in your report.

- **Title of the Project:** Come up with a succinct title that describes what is novel about your project.
- **Abstract:** A paragraph-long summary of your project, should be a shorter version of the introduction.
- **Introduction:** A complete summary of your project, with the following structure (1 paragraph each):
  - Setup the main motivation for the general area. This is not asking for the motivation behind your particular approach, but instead why is the task important in the first place. For example, if you are doing something in Visual QA or caption generation or text summarization, describe why these are important problems and where do they get applied.
  - Provide a brief summary of what people have done so far, focusing on their shortcomings. This is the precise motivation for your work, these are the shortcomings you are addressing in this work.
  - Describe in brief the main idea behind your work, and how you think it addresses shortcomings described in the previous section. This is your *hypothesis* for your experiments to prove empirically.
  - Summarize the evaluation setup and experiment results, and demonstrate that you have addressed the shortcomings you described above.

This is not a strict template, but unless you have a regularly publishing senior PhD student in your team, it would be best for you to stick to this structure. Your grade for the project will depend significantly on this paragraph: can you convince me the project was important and successful?

- **Related Work:** A few paragraphs on related work. Identify at least 4 – 5 papers that are most relevant to your project, and describe each of them in a single sentence or two. If not redundant with the introduction, include a paragraph on how your contribution is different from the ideas and results produced in other papers. This is the main section that where you will get a chance to argue the novelty of your project in context of what everything else have done.
- **Approach:** Technical summary of your proposed approach. Use notations, equations, and figures to assist your description, i.e. just saying “softmax on an LSTM” is not good enough. Note that you are not allowed to directly copy text, figures, or screenshots of equations from other papers directly, even if you are using their model or code. Everything in the report should be your own.
- **Experiments:** Describe the evaluation setup, baselines, and metrics, and include the results of the evaluation, using tables, graphs, plots, etc. as needed. You should try to provide qualitative evaluation as well, as you have been doing in the homeworks. The experiments should convince the reader why what you did works not only for your particular setting, but why it might work in other settings as well. As with the homework assignments, I am more concerned with whether you are able to analyze and present your results, instead of a higher accuracy.
- **Conclusions and Future Work:** Summarize your contribution, with a discussion of what you were, and what you were not, able to achieve. Describe how your report differs from the original proposed project, and what led to this difference. Finally, include a few lines of future work that describes what you would have done if you had, say, another quarter or two worth of time.

Depending on your project, it may not make sense for you to stick to these descriptions too closely, so please feel free to deviate from this structure if needed.

## Individual Contribution

On Canvas, there is an assignment called *Contribution* that requires you to describe your role and contribution to the project, using just a few sentences (1 paragraph maximum). Please do not include this in your report. If you are in a team on your own, just submit “Not applicable” to Canvas.

Optionally, in a separate paragraph, mention any concerns you may have about the fairness of the division of labor, and if you strongly feel your teammates should be graded differently from you (higher or lower). If you feel your team worked quite well (or well enough), as I anticipate for most teams it did, do not include such a paragraph.