CS4395: Final Project Report

FULL_GITHUB_REPOSITORY_URL

Full Name
Net ID

TODO: Due: May 12, 11:59pm

TODO: Update your name and details above. Names must be presented in alphabetical ascending order by the last name. If not filled correctly, we will subtract 2pt.

TODO: It is highly suggested to use the template for reports. You are free to use other softwares (e.g. Microsoft Word, Google Doc), but we prefer you follow the structure below.

Note: This template is only for your reference. If you think it is does not fit your project (e.g. different contents for each section or adding more sections), feel free to change it and provide explanations in the introduction. We will also adjust the grading based on your case accordingly.

1 Introduction (10pt)

TODO: The first paragraph should briefly describe task and data. **TODO:** The second paragraph should briefly describe your approach. Try to motivate it. **TODO:** The third paragraph should describe your main experiments and results, including mentioning the data you use.

2 Data (5pt)

TODO: Describe the data you use, including how many examples are in the training, development, and test sets.

3 Methodology (20pt)

Note: If your project is proposing a new model/method.

TODO: Describe your model. If you use a neural network, you should define the architecture. There's no need to write equations of common units (e.g., LSTM), so you can just use functions to refer to using such units. If you use linear models with features, provide details.

Note: If your project is more analysis-based and propose how to analyze model behaviors/outputs

TODO: Section 4 of [1] is an example. If you do manual inspections, please provide the details such as analysis/annotation guidelines.

4 Implementations (15pt)

TODO: Explain your implementation for the project (e.g. which commands/algorithms/data structures you used). What existing packages are used? When describing your implementation details (e.g. decoding), we suggest that you include corresponding but only **important** code pieces (e.g. classes, data structures, algorithms. It may be in the form of a screenshot or latex source code like in Listing 1).

```
import numpy
print("this is a piece of code")
```

Listing 1: Example of a Code Piece.

5 Experiments and Results (45pt)

Note: If your project is proposing a new model/method.

Development and Test Results **TODO:** Briefly explain here how you evaluated the models and metrics used. Put the results into clear tables or diagrams and include your observations and analysis.

Error Analysis **TODO:** Qualitative analysis of selected failure examples. Show and discuss error examples from your development set. Identify certain classes of errors and use the examples to

illustrate them. Please analyze with respect to unknown words as well.

(Bonus +2pt) Speed Analysis **TODO:** Speed analysis and computation needs are a major issue of the task. Makes sure to report the costs of inference per example.

Note: If your project is more analysis-based and propose how to analyze model behaviors/outputs

TODO: Please refer to Section 7 Experimental Results and Analysis in this paper, `https://aclanthology.org/2022.acl-long.274.pdf`. Basicly, you provide comprehensive analysis of model outputs, error cases, comparisons between model outputs and insights/obersations that can be derived.

6 Conclusion (5pt)

TODO: Brief conclusion summarizing findings (from both numerical results and qualitative analysis).

References

[1] Aliva Das, Xinya Du, Barry Wang, Kejian Shi, Jiayuan Gu, Thomas Porter, and Claire Cardie. Automatic error analysis for document-level information extraction. In *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 3960–3975, Dublin, Ireland, May 2022. Association for Computational Linguistics.