Fine-tune LLM for Language Translation

Fangyu Jiang   Matric No.: 429844

RPTU Kaiserslautern, Department of Computer Science

Note: *This report contains a project documentation and reflection on the portfolio task submitted for the lecture Engineering with Generative AI in WiSe 2024-25. This report is an original work and will be scrutinised for plagiarism and potential LLM use.*

1 Portfolio documentation

Compile a comprehensive documentation of your project, including all the project phases. You will need to explain every choice you made during the project and your thoughts about the results you get. You will introduce the results in suitable visualisation. Furthermore, you will need to explain which criteria you follow to build your prompts and how they affect the results.

Students write the entire documentation with sections, sub-sections, diagrams, etc in this section. Please write as comprehensively as possible. Head to the document 1_documentation.tex. You are free to use as many subsections as required. We will not provide a template for documentation.

1.1 Research Phase

1.2 Design Phase

1.3 Implementation Phase

2 Reflection

In 3-5 pages, 1500-2000 words

This section needs to be adjusted to align with the reflection requirements specified in the selected task.

Note: You should address all the questions from your selected task. Please list each question and provide your answers in the following enumeration.

For example:

1. What was the most interesting thing you learned while working on the portfolio? What aspects did you find interesting or surprising?

   Answer:

2.

All of the resources used by the student to complete the portfolio task should be organised in the references section. **Note that the Reference section does not count towards the number of pages of the report.** Example references are given below [1] [2] [3]. **If you are using a reference manager like Zotero, you can export your Zotero library as a .bib file and use it on Overleaf. As you cite the article/technology/library in your main text, the References section will automatically update accordingly.** Please include a full list of references found. If students are using Zotero for their research paper management, a bibTeX will help them during citation which automatically adds references to the report.

References

[1] Albert Einstein. Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]. *Annalen der Physik*, 322(10):891–921, 1905.

[2] Donald Knuth. Knuth: Computers and typesetting.

[3] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LATEX Companion.* Addison-Wesley, Reading, Massachusetts, 1993.