THESIS SUPERVISOR'S REPORT

I. IDENTIFICATION DATA

Thesis title:	**Evaluation of recommendations for LLM prompt engineering**
Author's name:	**Boris Rakovan**
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Computer Science
Thesis reviewer:	doc. Mgr.Viliam Lisý, MSc., Ph.D.
Reviewer's department:	Department of Computer Science

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment   **ordinarily challenging**

How demanding was the assigned project?

The project required working with novel technologies of LLMs beyond the contents of the courses the student took. The student had to read and understand scientific papers on the LLM evaluation methodologies. On the other hand, there are many high-quality tutorials and other resources available on using these technologies and the thesis did not require deep understanding of complicated algorithms or methods.

Fulfilment of assignment   **Choose an item.**

How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.

All points of the assignment are fulfilled. The student evaluated more recommendations and more models than strictly required by the assignment.

Activity and independence when creating final thesis   **A - excellent.**

Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.

I enjoyed the collaboration with the student. He was always on time and well prepared. He had specific agenda for the meetings, he was independently seeking new literature and he initiatively implemented an evaluation framework more general than necessary for the thesis itself.

Technical level   **A - excellent.**

Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?

The decisions in the thesis are well explained and technically sound. The results are discussed properly, the statistical significance of the results is demonstrated.

Formal level and language level, scope of thesis   **B - very good.**

Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?

English is very good and fluent. The student acknowledges the use of an LLM to improve it. There are minor typographical issues, such as inconsistent size of the text in the tables, sections with only tables/examples without explanatory text. The clarity of the text can be improved at places. For example, the student uses a red arrow symbol in the prompt, but its meaning is not explained. The length of the thesis is adequate, the text is compact, but includes all necessary information.

Selection of sources, citation correctness   **C - good.**

Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?

The chosen references are relevant and the resources are generally well cited. The distinction between original and prior work is clear. At some places, for example when introducing Gemini, it would be better to include more references to support the claims. The references are almost always citing preprint arXiv instead of the proper publications, even though they exist. The formatting of online references is non-standard and they do not include the exact date of accessing the web page. This is, however, largely my fault, since the earlier drafts I reviewed also had these issues and I did not comment on them in my feedbacks.

Additional commentary and evaluation (optional)
Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.

Please insert your comments here.

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

Summarize your opinion on the thesis and explain your final grading.

This is an excellent thesis that completely fulfills the assignment. It shows the student's ability to perform original research and clearly present its result. The student was very active, systematic and worked hard working in the whole period of our collaboration. There are minor issues with typography and references, but I am convinced they would not be there if my feedback to his earlier drafts was more thorough.

The grade that I award for the thesis is **A - excellent.**

Date: **17.6.2024**   Signature: