**FACULTY
OF INFORMATION
TECHNOLOGY
CTU IN PRAGUE**

Review report of a final thesis

Reviewer: doc. Ing. Pavel Kordík, Ph.D.
Student: Bc. Vendula Švastalová
Thesis title: Harnessing Spatial Context for Item Recommendation
Branch / specialization: Knowledge Engineering
Created on: 2 June 2024

Evaluation criteria

1. Fulfillment of the assignment

▸ [1] **assignment fulfilled**
  [2] assignment fulfilled with minor objections
  [3] assignment fulfilled with major objections
  [4] assignment not fulfilled

The thesis exceeds the typical scope of master theses in its research ambitions and fully meets the assignment's requirements.

2. Main written part   100 / 100 (A)

The thesis is well-written and easy to read. It includes a comprehensive literature review, detailed methodology, and clear presentation of experimental results. The logical structure and depth of content demonstrate a high level of understanding and ability to do quality research. The thesis makes appropriate use of formal notations and technical terminology, particularly in describing the models and algorithms used. The formal descriptions are accurate and align with standard practices in the field of recommender systems and spatial data processing.

3. Non-written part, attachments   100 / 100 (A)

Code is nice and well-documented, ensuring clarity and reproducibility. The baseline approaches used are sufficiently challenging and were outperformed by a large margin, demonstrating the effectiveness of the proposed methods.

4. Evaluation of results, publication outputs and awards   100 / 100 (A)

A believe results of this thesis can be easily published in a good international journal.

The overall evaluation

100 /100 (A)

Very nice thesis that brings new research outcomes. The quality of both text and experiments is outstanding.

Questions for the defense

It looks like that LLCR tends to overfit easily for some datasets. Do you have some regularization or other methods in mind that might improve robustness of the method against data overfitting? Will the early stopping condition work well in all scenarios?

Instructions

Fulfillment of the assignment

Assess whether the submitted FT defines the objectives sufficiently and in line with the assignment; whether the objectives are formulated correctly and fulfilled sufficiently. In the comment, specify the points of the assignment that have not been met, assess the severity, impact, and, if appropriate, also the cause of the deficiencies. If the assignment differs substantially from the standards for the FT or if the student has developed the FT beyond the assignment, describe the way it got reflected on the quality of the assignment's fulfilment and the way it affected your final evaluation.

Main written part

Evaluate whether the extent of the FT is adequate to its content and scope: are all the parts of the FT contentful and necessary? Next, consider whether the submitted FT is actually correct – are there factual errors or inaccuracies?

Evaluate the logical structure of the FT, the thematic flow between chapters and whether the text is comprehensible to the reader. Assess whether the formal notations in the FT are used correctly. Assess the typographic and language aspects of the FT, follow the Dean's Directive No. 52/2021, Art. 3.

Evaluate whether the relevant sources are properly used, quoted and cited. Verify that all quotes are properly distinguished from the results achieved in the FT, thus, that the citation ethics has not been violated and that the citations are complete and in accordance with citation practices and standards. Finally, evaluate whether the software and other copyrighted works have been used in accordance with their license terms.

Non-written part, attachments

Depending on the nature of the FT, comment on the non-written part of the thesis. For example: SW work – the overall quality of the program. Is the technology used (from the development to deployment) suitable and adequate? HW – functional sample. Evaluate the technology and tools used. Research and experimental work – repeatability of the experiment.

Evaluation of results, publication outputs and awards

Depending on the nature of the thesis, estimate whether the thesis results could be deployed in practice; alternatively, evaluate whether the results of the FT extend the already published/known results or whether they bring in completely new findings.

The overall evaluation

Summarize which of the aspects of the FT affected your grading process the most. The overall grade does not need to be an arithmetic mean (or other value) calculated from the evaluation in the previous criteria. Generally, a well-fulfilled assignment is assessed by grade A.