THESIS REVIEWER'S REPORT

I. IDENTIFICATION DATA

Thesis title:	**Predicting sports matches with neural models**
Author's name:	Aleksandra Pereverzeva
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Computer Science
Thesis reviewer:	Ing. Jan Drchal, PhD.
Reviewer's department:	Department of Computer Science

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	**challenging**
How demanding was the assigned project?	
I find the assignment challenging mostly due to application of Graph Neural Networks.	

Fulfilment of assignment	**fulfilled**
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.	
The assignment was fulfilled.	

Methodology	**correct**
Comment on the correctness of the approach and/or the solution methods.	
In general, I agree with the used methodology. One objection I have is, that while the Section 4.4.2 deals with large selection of meta-parameters; there is, unfortunately, very little discussion on how these influence the results. I have expected a related section in the experimental part of the thesis. Another small objection is towards the use of the accuracy in the experimental part as the dataset is not balanced. Assessment by means of F1-score or giving full confusion matrices would be most likely a better choice. Nevertheless, the balancing is treated by means of weighting in Section 5.2, where the confusion matrices are also shown.	

Technical level	**B - very good.**
Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?	
Overall, I am satisfied with the technical level of the thesis. One objection is towards missing details of neural architectures involved. For example, it is not perfectly clear, how the embeddings are trained. Also, other possibilities of embedding construction might have been considered. For the simple ANN model, one may exploit the temporal information by using, e.g., recurrent layers and extracting the embeddings deeper in the network.	

Formal and language level, scope of thesis	**A - excellent.**
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?	
The thesis is well-written and its structure is easy to follow. There are hardly any typos.	

Selection of sources, citation correctness	**A - excellent.**
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 sources are well cited. The number of citations is above average. Source code is easy to understand.

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.

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. Pose questions that should be answered during the presentation and defense of the student's work.

I have the following questions for the student:

1) What is meant by the "input embedding dimension" in Section 5.1.2? Is it the actual embedding size? What is your explanation for such a small value?
2) Have you considered Spatial-temporal graph neural networks (STGNNs) as mentioned in [11] (cited in your thesis)?

The grade that I award for the thesis is **B - very good.**

Date: **18.1.2021**   Signature: