

I. IDENTIFICATION DATA

Thesis title:	Decision Trees Behavior Visualization and Analysis
Author's name:	Jan Krátký
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Cybernetics
Thesis reviewer:	Doc. Ing. Tomáš Kroupa, Ph.D.
Reviewer's department:	Department of Computer Science

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	ordinarily challenging
<i>How demanding was the assigned project?</i>	
The first part of the project consisted of the study of existing methods for the decision tree visualization. According to the guidelines, the student's task was to describe those methods together with their implementation, and further analyze the gap between the state-of-the-art and the existing solutions at Seznam. The goal was to implemented the proposed methods and evaluate their benefits. This assignment combines the research part about known methods implemented as Python libraries with the programming part, where the latter is not extraordinarily demanding.	

Fulfilment of assignment	fulfilled
<i>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.</i>	
All the assigned tasks were fulfilled.	

Methodology	correct
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
The proposed solution based on Sankey diagrams seems to be original and a visually appealing way to represent decision trees. I would appreciate a more detailed comparison of the student's approach to other libraries discussed in the thesis, for example, in the form of a table listing important properties of the visualization methods.	

Technical level	D - satisfactory.
<i>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?</i>	
The description of existing methods in Chapter 2 is somewhat sketchy and vague. The main body of the thesis, Chapter 5, is written clearly and contains sufficiently many details about existing visualization techniques. I miss any table comparing existing approaches in an organized way. Also the details how to evaluate the efficiency of this implementation by the stakeholder are not presented.	

Formal and language level, scope of thesis	B - very good.
<i>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?</i>	
The level of English and style is satisfactory. There are many typos, which could have been easily avoided.	

Selection of sources, citation correctness	B - very good.
<i>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?</i>	
The list of references includes the most important items related to the topic of the thesis. My only two objections are that the citations are often inserted in a rather confusing way right after the mathematical formulas, and the label "section" is not used when referring to the section xy.z.	

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

1. Can you be more specific about how the proposed solution helped analysts in Seznam in comparison with previously used packages?

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

Date: **5.6.2023**

Signature: