THESIS SUPERVISOR'S REPORT

I. IDENTIFICATION DATA

Thesis title:	**Auto-labelling of pedestrian road crossing from a monocular camera**
Author's name:	**Jonáš Koditek**
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of cybernetics
Thesis reviewer:	Ing. Lukáš Neumann, Ph.D.
Reviewer's department:	Department of cybernetics

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	**ordinarily challenging**
The assignment required running existing object detector and image segmentation methods on a given autonomous driving dataset, and designing a straightforward heuristics to detect pedestrians in a road. I view the assignment as ordinarily challenging.	

Fulfilment of assignment	**fulfilled**
The student managed to automatically create training data for pedestrian crossing prediction and to train a classifier with decent accuracy using the generated training data. The classifier was then validated on a small, manually labelled dataset, also curated by the student. The assignment was therefore fulfilled.	

Activity and independence when creating final thesis	**B - very good.**
The student worked independently, he attended our regular meetings and came prepared. The only minor objection is that especially at the beginning the student did not seem to fully focus on the project, which led to some delays and we couldn't fully conduct all the anticipated experiments in the end.	

Technical level	**A - excellent.**
The text is technically sound, the student's work is clearly explained, and the results are well presented.	

Formal level and language level, scope of thesis	**A - excellent.**
The text is in English, which is very positive, and the language level is very good. The work is well structured, my only minor objection is to certain elements of Chapter 2 where the text goes into too much detail for topics which are common knowledge and not the focus of the thesis, such as Stochastic Gradient Descent or image preprocessing.	

Selection of sources, citation correctness	**B - very good.**
The text cites major recent object detection methods in literature, although the literature review could have been longer and could also have included relevant work in auto-labelling / pedestrian datasets. The citations throughout the paper are adequate, the reader can clearly differentiate between prior work and student's contribution.	

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

Overall, I think the student demonstrated his understanding of the underlying methods and how to combine them for the benefit of the auto-labelling problem, and experimentally demonstrated the selected approach worked, including training a classifier without using any human labels.

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

Date: **11.6.2024** Signature: