# Review report of a final thesis

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| **Student:** | Bc. Vladislav Khachaturian |
| **Reviewer:** | doc. Jakub Lokoč |
| **Thesis title:** | Web interface for real-time video analytics system |
| **Branch of the study:** | Web and Software Engineering |

**Date:** 1. 6. 2020

| Evaluation criterion: | The evaluation scale: 1 to 4. |
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| **1.  Fulfilment of the assignment** | *1 = assignment fulfilled,*<br>***2 = assignment fulfilled with minor objections,***<br>*3 = assignment fulfilled with major objections,*<br>*4 = assignment not fulfilled* |

*Criteria description:*
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.

*Comments:*
The author presents a thesis focusing on video analytics from online or offline video sources. The work is a part of a larger project and details a client-server architecture enabling processing of video sources (format transformation, feature extraction) and their augmented presentation in a web client. Being a part of a larger project may limit meeting some of the assignments, but key assignments have been met. The portal enables video playback from selected sources, video analysis, presentation of detected features and interface for a future analytics section.

| Evaluation criterion: | The evaluation scale:  0 to 100 points (grade A to F). |
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| **2.  Main written part** | *75 (C)* |

*Criteria description:*
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. 26/2017, 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.

*Comments:*
The text is very technical and hard to read by users not familiar with used technologies. More general descriptions based on high-level diagrams, data processing pipe-lines and interfaces would be more readable.

| Evaluation criterion: | The evaluation scale:  0 to 100 points (grade A to F). |
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| **3.  Non-written part, attachments** | *75 (C)* |

*Criteria description:*
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.

*Comments:*
During testing, the portal was stable and worked well. Source codes were not available.

| Evaluation criterion: | The evaluation scale:  0 to 100 points (grade A to F). |
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| **4.  Evaluation of results,<br>publication outputs and awards** | *75 (C)* |

*Criteria description:*
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.

*Comments:*
The results could be deployed in practice.

| Evaluation criterion: | No evaluation scale. |
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### 5. Questions for the defence

*Criteria description:*
Formulate questions that the student should answer during the Presentation and defence of the FT in front of the SFE Committee (use a bullet list).

*Questions:*
What limits the portal to support assigned "Playback of several video streams simultaneously including identification of the same objects and their trajectories."?
Why real-time simulation initializes so long?
What is the motivation for Figures 5.6 - 5.10? For example, what reads and hits demonstrate for the portal?
How does it happen that a timestamp is incorrect or missing?

| *Evaluation criterion:* | *The evaluation scale:  0 to 100 points (grade A to F).* |
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| **6. The overall evaluation** | *75 (C)* |

*Criteria description:*
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.

*Comments:*
The presented thesis focuses on an important topic, where a lot of "invisible" work is spent during portal design, debugging and synchronization with other team members.


Signature of the reviewer: