Supervisor's statement of a final thesis

Student: Bc. Adam Platkevič
Supervisor: prof. Ing. Daniel Sýkora, Ph.D.
Thesis title: Stylizing Vector Animation Using Natural Dynamics of Artistic Media
Branch of the study: Computer Science

Date: 20. 1. 2021

<table>
<thead>
<tr>
<th>Evaluation criterion</th>
<th>The evaluation scale: 1 to 4.</th>
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<tbody>
<tr>
<td>1. Fulfilment of the assignment</td>
<td>1 = assignment fulfilled, 2 = assignment fulfilled with minor objections, 3 = assignment fulfilled with major objections, 4 = assignment not fulfilled</td>
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<td>Criteria description:</td>
<td>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.</td>
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<tr>
<td>Comments:</td>
<td>The thesis deals with the problem of example-based stylization of simple vector animations. The aim is to emphasize motion perception by leveraging dynamic properties of real artistic media, such as watercolor diffusion. To my best knowledge, such an approach to stylization was not studied in the literature yet. Due to this fact, the assignment has a challenging research aspect. Despite this fact, the student fulfilled the assignment far beyond my original expectations and developed a novel approach ready for publication.</td>
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<th>Evaluation criterion</th>
<th>The evaluation scale: 0 to 100 points (grade A to F).</th>
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<td>2. Main written part</td>
<td>100 (A)</td>
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<tr>
<td>Criteria description:</td>
<td>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.</td>
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<tr>
<td>Comments:</td>
<td>The thesis is written very well. The text has adequate structure and fulfills all essential formal and typographic principles. The text shows that the student studied the problem intensely and understands the current state-of-the-art in the field. I highly appreciate the English language choice, making the transition into a conference paper notably easier.</td>
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<td>3. Non-written part, attachments</td>
<td>100 (A)</td>
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<td>Criteria description:</td>
<td>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.</td>
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<td>Comments:</td>
<td>Besides the high-quality implementation, an essential aspect of the thesis was capturing appropriate samples of real artistic media. I found this part notably more challenging than I initially expected; however, the student managed to overcome all difficulties and capture samples from which it was possible to produce appealing results.</td>
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<td>4. Evaluation of results, publication outputs and awards</td>
<td>100 (A)</td>
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<td>Criteria description:</td>
<td>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.</td>
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The proposed method and the results it produces encourage publication at some appropriate venue such as CESCG or SCA conferences. I would also highly recommend further develop this new promising research direction, e.g., during the subsequent postgraduate studies.

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<th>Evaluation criterion:</th>
<th>The evaluation scale: 1 to 5.</th>
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<td>5. Activity and self-reliance of the student</td>
<td>5a: 1 = excellent activity, 2 = very good activity, 3 = average activity, 4 = weaker, but still sufficient activity, 5 = insufficient activity</td>
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<td></td>
<td>5b: 1 = excellent self-reliance, 2 = very good self-reliance, 3 = average self-reliance, 4 = weaker, but still sufficient self-reliance, 5 = insufficient self-reliance.</td>
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Criteria description:
From your experience with the course of the work on the thesis and its outcome, review the student’s activity while working on the thesis, his/her punctuality when meeting the deadlines and whether he/she consulted you as he/she went along and also, whether he/she was well prepared for these consultations (5a). Assess the student’s ability to develop independent creative work (5b).

Comments:
The student was highly independent, had many innovative ideas, often consulting and sharing the preliminary results and source code on the GitHub repository.

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<td>6. The overall evaluation</td>
<td>100 (A)</td>
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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:
I am delighted with this thesis as the proposed method’s quality and its results went beyond my original expectations. The thesis confirms the student is not only talented in doing research but has also sufficient engineering skills to evaluate new research ideas in practice.

Signature of the supervisor: