# THESIS SUPERVISOR'S REPORT

## I. IDENTIFICATION DATA

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|---|---|
| **Thesis title:** | **Two-view matching of image containing planar surface exploiting monodepth estimation** |
| **Author's name:** | **Vávra Václav** |
| **Type of thesis :** | master |
| **Faculty/Institute:** | Faculty of Electrical Engineering (FEE) |
| **Department:** | Department of Computer Science |
| **Thesis supervisor:** | Dmytro Mishkin |
| **Supervisor department:** | Department of Cybernetics |

## II. EVALUATION OF INDIVIDUAL CRITERIA

| **Assignment** | **challenging** |
|---|---|

*How demanding was the assigned project?*

The task was to improve the method for two-view matching using the monocular depth estimation, which was originally published at top computer vision conference – ECCV. I consider such task as challenging and without a guaranteed outcome.

| **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.*

Vaclav was able to conduct all the necessary experiments and respond to my feedback. All the assigned tasks were fulfilled.

| **Activity and independence when creating final thesis** | **A - excellent.** |
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*Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.*

Originally, we have a rough ride because of health problems in Vaclav family, requiring a lot of his attention. However, when the situation in his family improved, Vaclav has gone back to speed. He has shown rigor in experiments and was able to dig deeply into the technical details of the methods proposed improvements based on his deep understanding of the methods.  Finally, when I was a bit neglecting my duties as a supervisor because of my own PhD defense, he was able to adapt and continue to work on the project on his own.

| **Technical level** | **A - excellent.** |
|---|---|

*Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?*

During our meetings, Vaclav's questions to me were straight at the point and I believe that he has developed expertise in the field. We also planning to submit the distilled version of the paper to one of the major computer vision conferences.

| **Formal level and language level, scope of thesis** | **C - good.** |
|---|---|

*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?*

Vaclav has spent a considerable amount of time working on the structure of the thesis and the method to be technically correct and sound. The language and the level of presentation however would benefit from the improvements.

| **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 prior work is acknowledged well and the citations as correct.

**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.*

During the work on thesis we had lots of highs and downs. There were many ideas, which end up not working. Vaclav have shown rigorous approach to the experiment, trying to break the method in multiple experiments rather than happily accept that the method is working after a single run. Moreover, when he stuck after the multiple failures, he has not given up and continued to generate ideas, which finally made the thesis content. He was also able to quickly grasp the essence of the ideas, which came from my side. I can summarize our collaboration as "slowly but surely". It was a pleasure to work with Vaclav.

Regarding the thesis itself, I believe, I am not the one who should evaluate it, but the thesis reviewer.

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

Date: **21.1.2022**                                    Signature: Dmytro Mishkin