

School of Science

STATEMENT OF MASTER'S THESIS ASSESSMENT

Master's Programme in Computer, Communication and Information Sciences

Author of the thesis: Emil Kreutzman

Title of the thesis: Active learning for annotation and recognition of faces in video: An end-to-end system

Supervisor: Jorma Laaksonen

Advisor: -

Location: Department of Computer Science

The following areas should be given a number grade.

Definition of research scope and goals: 4

The scope and the goals of the research have been defined well by specifying four research questions. For some of these questions the thesis searches and proposes multiple answers, whereas for some only one solution is presented and studied.

Command of the topic: 4

A sufficient literature survey is presented that introduces and describes the methods that are used in the implemented system. Some of the topics could have been described either more widely or in more detail, but overall the thesis shows that the author has good command of the topic and has been able to balance well between different subareas of the work. More than one hundred written sources have been cited and the references cover the various topics of the thesis very well.

Methods: 4

The author has selected appropriate methods to be used in his video annotation framework. The methods for face detection and recognition can be said to present the state of the art in their area. These methods have been utilized wisely, but there have not been any major efforts to compare between available techniques or to try to improve them. On the other hand, for some subtasks of the work, the author has experimented with a selection of available techniques and drawn trustworthy conclusions on their performance in the task at hand. Some of the research questions set in the beginning are given explicit answers in the thesis, whereas for some questions the implemented system serves as an answer by itself.

Results and contribution: 4

The author has been very efficient and independent in completing the thesis work. The thesis does not propose anything scientifically novel, but provides a state-of-the-art system that is interesting from the point of view of industry and practitioners of media annotation. The software has been made publicly available and may therefore have wide impact in different fields of science.

Presentation, language and structure: 5

The thesis is very clear and well written. A vice choice has been made to first introduce the main contribution of the work, the full end-to-end pipeline for face annotation in videos,

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before describing the actual methods used to implement each of the processing stages. Overall, the thesis is pleasant to read and the figures and tables visualize and summarize the most important details of the work very well. Practically no spelling nor grammar errors could be found in the text during its writing process.

Thesis process: 5

The work was carried out and the thesis finalized in less than six months. The author set the schedule for himself and was able to keep the planned schedule very well.

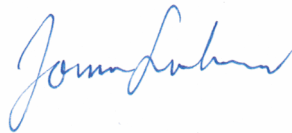
Conclusion of the above areas of assessment:

The thesis presents a very good piece of skillful engineering work and experimentation with the implemented system. Some of the methodological selections made during the implementation stage could have been based on documented experimentation, but that was not possible in the set time frame that was due to external factors limited to strictly six months.

Grade: 4

Date: 3.5.2021

Signatures:



Jorma Laaksonen

docent, thesis supervisor