

# THESIS SUPERVISOR'S REPORT

#### I. IDENTIFICATION DATA

Thesis title: Application of Spatiotemporal Modeling Used in Robotics for Demand

**Forecast** 

Author's name: Filip Kubiš

**Type of thesis:** bachelor

Faculty/Institute: Faculty of Electrical Engineering (FEE)

**Department:** Department of Cybernetics

Thesis reviewer: Tomáš Vintr

**Reviewer's department:** Department of Computer Science

#### **II. EVALUATION OF INDIVIDUAL CRITERIA**

Assignment challenging

How demanding was the assigned project?

The student had to research two scientific fields and consider their mutual combination.

#### **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.

The student not only fulfilled the assignment but also described and experimentally proved fundamental drawbacks of usual experiments in the field. Then he proposed two novel methods for the comparison of the forecasting methods. He also proposed his spatiotemporal model that suits well for a demand forecasting task.

#### Activity and independence when creating final thesis

## A - excellent.

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.

The student was very diligent. During his work on the thesis, he started to work in the laboratory actively.

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?

Some findings of the thesis were used in a journal paper. The thesis is a proof of concept that will be further developed.

#### Formal level and language level, scope of thesis

# B - very 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?

There are some minor imperfections, but the text is very well organized and understandable.

### 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



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student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?

The selection of sources was adequate to the bachelor thesis.

#### 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.

If further developed, the thesis can impact both scientific fields.

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

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

The student not only fulfilled the assignment but also described and experimentally proved fundamental drawbacks of usual experiments in the field. Then he proposed two novel methods for the comparison of the forecasting methods. He also proposed his spatiotemporal model that suits well for a demand forecasting task.

The student was very active, and during the work on thesis, he started to cooperate on the scientific tasks actively. His findings were used in a journal paper. His thesis is a proof of concept that will be further developed. Furthermore, the student works on his conference paper.

Date: <b>04/06/2020</b>	Signature: