THESIS SUPERVISOR'S REPORT

extraordinarily challenging



I. IDENTIFICATION DATA

Thesis title:	Personal Spatial Zones in Human-Robot Interaction Scenarios
Author's name:	Adam Rojík
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Cybernetics
Thesis reviewer:	Alessandra Sciutti, Ph.D.
Reviewer's department:	Italian Institute of Technology

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment

How demanding was the assigned project?

The project was extraordinarily challenging as it involved working with two robots (Nao and Pepper), programming realtime behaviors in response to sensory information from robot and external sensors, including several software environments (NaoQi, ROS, YARP). In addition, experiments with approximately 100 participants were conducted and evaluated.

Fulfilment of assignment

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 assignment was fulfilled in all respects.

Activity and independence when creating final thesis

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 proved to be independent and proactive, overcoming a number of nontrivial issues. In some phases of the project (thesis writing), his time management could have been better and work consulted more regularly.

Technical level

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?

The thesis is technically sound and the student had to employ expertise beyond his field of study.

Formal level and language level, scope of thesis

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?

The thesis is very extensive and covers a lot of topics from different disciplines, which poses a challenge for a compact rigorous presentation. The student did his best to organize the thesis and largely succeeded, with a number of very useful schematics, cross-references etc.

Selection of sources, citation correctness

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 student conducted a study of the related work beyond the works recommended by the supervisors. Table 2.2 is a contribution in itself.

Additional commentary and evaluation (optional)

d of ctudy

A - excellent.

A - excellent.

A - excellent.

A - excellent.

fulfilled

THESIS SUPERVISOR'S REPORT



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.

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

This is a truly excellent thesis in which the student had to master a number of robotics problems (using and bridging different middleware, camera-to-robot calibration, etc.) as well as learn a completely new domain of social robotics / human-robot interaction. He succeeded. There is already one publication from this thesis and two additional ones are planned.

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

Date: 8.1.2021

Signature: