

I. IDENTIFICATION DATA

Thesis name:	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	extraordinarily challenging
<i>Evaluation of thesis difficulty of assignment.</i>	
The project entailed extremely challenging tasks, which require expertise in different domains, including the development of appropriate robot behavior for different robotic platforms, the experimental testing on a very large number of participants and the analysis of interaction data of different types (both questionnaire and behavioral data).	

Satisfaction of assignment	fulfilled
<i>Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.</i>	
The thesis addresses the research questions raised in a proper and detailed way.	

Method of conception	correct
<i>Assess that student has chosen correct approach or solution methods.</i>	
The student has conducted extensive experimental testing properly designed to address the research questions he focused on. Moreover, he improved the methods leveraging on the results of pilot tests.	

Technical level	A - excellent.
<i>Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.</i>	
The student has shown the skill to properly elaborate the knowledge gained by literature review and the findings of his studies, to design and improve the methodology of research. Moreover, he exhibited an excellent skill in controlling the different robot platforms and different sensing included in the experiments.	

Formal and language level, scope of thesis	A - excellent.
<i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i>	
The thesis is written in a clear language with proper notations. The structure could have been simplified, by opting for a more succinct presentation of the adopted methods. However, the descriptions are clear and the pictures are properly used to guide the reader's understanding.	

Selection of sources, citation correctness	A - excellent.
<i>Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.</i>	
The thesis presents a very nice analysis of the state of the art, with a very useful tabular summary. The student clarifies well which elements of his research are inspired by previous literature and which elements are novel.	

Additional commentary and evaluation

Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.

Please insert your commentary (voluntary evaluation).

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation. Please present apt questions which student should answer during defense.

The thesis presents a very interesting line of research, with relevant results from a series of human-robot interaction experiments. It is noteworthy that, within the framework of a bachelor thesis, the student could complete both the setup of such complex tests – involving multiple robots, different software, a variety of sensors – and the experimental tests themselves, plus the data analysis. I also appreciated the rigor of the approach, where insights from pilot analysis were used to inform and correct the subsequent testing.

As a general question for the defense, I would ask to expand a bit more the commentary of the results of the analysis presented in the thesis (9.1.3 Distance assigned to each condition), to discuss what the different method of computing distances reveals.

I evaluate handed thesis with classification grade **A - excellent**.

Date: **25.1.2021**

Signature: