THESIS SUPERVISOR'S REPORT

I. IDENTIFICATION DATA

Thesis title:	**Gaze Control and Stabilization for a Humanoid Robot Using Neck Joints**
Author's name:	**Zuzana Jindrová**
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Cybernetics
Thesis reviewer:	Doc. Mgr. Matěj Hoffmann, PhD, Ing. Jakub Rozlivek
Reviewer's department:	Department of Cybernetics

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment **challenging**

How demanding was the assigned project?

The project required the student to get acquainted with the iCub robot and its kinematics to implement a neck controller and deploy it to the real robot and test it in a human-robot interaction scenario.

Fulfillment 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 assignment was fulfilled in all aspects.

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 able to work independently the whole time. The student always fulfilled the given tasks between the meetings. The student was able to solve the problems on its own. The thesis was finished well before the deadline, allowing sufficient time to the supervisors to provide feedback on the final document.

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?

The implemented neck controller with all its features works well as it was shown in several experiments. The code is well documented and parameterizable.

Formal level and language level, scope of thesis **A - excellent.**

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 document comprehensively documents what has been done with appropriate usage of formal notation and schematics of a high standard. The number and quality of figures is exceptional.

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?

All sources were appropriately selected and cited.

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.

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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.

Overall, this is an outstanding Bachelor thesis with very solid mathematical background, appropriate robotic implementation and evaluation, and neat documentation of all the work accomplished.

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

Date: **5.6.2024** Signature: