TECHNICKÁ UNIVERZITA V LIBERCI
Fakulta mechatroniky, informatiky
a mezioborových studií

# DIPLOMA THESIS EVALUATION
## SUPERVISOR EVALUATION

**Author name:** Marek Valsik

**Supervisor:** Prof. Dr. rer. nat. Stefan Bischoff

**Thesis title:** Hard- and Software Development for a Mobile Robot based on RaspberryPi and OpenCV

A. Abstract quality, keywords matching . . . . . . . . . . . . . .  Excellent (1)

B. Research scope and processing . . . . . . . . . . . . . . . . .  Excellent (1)

C. Level of theoretical part . . . . . . . . . . . . . . . . . . . .  Excellent (1)

D. Appropriateness of the methods . . . . . . . . . . . . . . .  Excellent (1)

E. Results elaboration and discussion . . . . . . . . . . . . .  Excellent (1)

F. Students own contribution . . . . . . . . . . . . . . . . . .  Excellent (1)

G. The conclusion statement . . . . . . . . . . . . . . . . . .  Excellent (1)

H. Fulfillment of Thesis tasks (goals) . . . . . . . . . . . . .  Fulfiled

I. Structure, correctness and fulness of references . . . . . . . . . .  Excellent (1)

J. Typographical and language level . . . . . . . . . . . . . . .  Excellent (1)

K. Formal quality . . . . . . . . . . . . . . . . . . . . . . . .  Excellent (1)
   (text structure, chapters order, clarity of illustrations)

L. Student access (independence, activity etc.) . . . . . . . . . . .  Excellent (1)

Comments, remarks

- Thesis deals with Hard- and Software Development for a Mobile Robot based on RaspberryPi and OpenCV

- Tasks were: - Choose a suitable hardware platform for mobile robot

- Implementation of access to robot devices like sensors, engines etc.

- Porting of OpenCV computer vision library to the embedded RaspberryPi platform

- Detection of objects with OpenCV

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Overall assessment:

- excellent work with a lot of practical effort

Questions for the defense:

1. Can you explain the main features of RaspberryPi ?
2. Why did you decide for RaspberryPi ?
3. What are the main features of the OpenCV Computer Vision library ?
4. Can you show some features of your robot live ?
....

## Overall classification:

Work meets the Master degree requirements and therefore I recommend it for defense

**I suggest to classify this work by grade  Excellent (1)**

In  Zittau

date  04.01.2016

By signing I certify that I am not in any personal relationship with the author of the thesis

Prof. S. Bischoff

Prüfungsausschuss
Hochschule Zittau/Görlitz
University of Applied Sciences
Fakultät Elektrotechnik und Informatik
Fachbereich Elektro- und Informationstechnik

Supervisor signature