

Review of Bachelor's Thesis

Student: Charvát Michal

Title: Detection of People in Room Using Low-Cost Thermal Imaging Camera (id 21293)

Reviewer: Kempter Guido, prof., FHV

1. **Assignment complexity** **more demanding assignment**
The demanding part of his work was to put into operation the hardware part of the detection system, i.e. controlling the camera module over I2C and transferring video frames from the thermal camera module to a master control device over SPI.
2. **Completeness of assignment requirements** **assignment fulfilled**
The submitted work fulfills the assignment. Following points do have potential for further development:
 - detecting people under special conditions (e.g., warm environment, people standing one behind the other),
 - locating people only works on special assumptions.
3. **Length of technical report** **in usual extent**
Comparing the scope of the submitted technical report with the required range, the bachelor thesis is within the usual range.
4. **Presentation level of technical report** **100 p. (A)**
Mr. Charvát delivered an excellent presentation at the uDay XVI technological conference in Dornbirn.
5. **Formal aspects of technical report** **95 p. (A)**
The typographic and linguistic aspects of the work are almost error-free.
6. **Literature usage** **90 p. (A)**
The student has used many relevant resources. All elements taken over are properly distinguished from his own results and considerations. Most bibliographic quotes are complete and in accordance with citation practices and standards.
7. **Implementation results** **85 p. (B)**
The level and functionality of the technical and software solution, created by the student himself, is adequate. The quality of the documentation is good. The validation and verification could have been more detailed.
8. **Utilizability of results**
The work of the student extends already published results and there is the possibility of using the results of the work in practice.
9. **Questions for defence**
 - Describe the next steps to develop a commercial product based on your results.
10. **Total assessment** **95 p. excellent (A)**
The work is a good basis for further development.

In Brno 13. August 2018

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signature