

Title: Image Recognition with Deep Learning for Web Scrapped Images

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The thesis is concerned on the image recognition using the deep learning techniques. It should be emphasized, that corresponding subjects, Artificial intelligence and Machine perception and image analysis are on the master level of the Automation and Instrumentation Technology, and the student had to study everything from the scratch. Mr. Toubar worked very independently, without any technical support from the side of the Faculty.

Student solved problems with using Python scripts, acquiring images, hosting on computational servers, most of those experiences are described in the thesis. The final and probably most interesting experiment with classifying collected images (pages 55 to 57) is unfortunately recorded in very short, mainly the methodology of training and testing of the net is not too obvious.

The thesis is very extensive and understandable. From the opposite point of view, I have failed to persuade the student to keep internal links, references and page numbering inconsistency. The student was focused on problem solving, so there is a little theory about this.

In complete, I would recommend this bachelor work to be defended, and I suggest a **“C”-good** as a classification.

In Prague, June 21, 2019

Ing. Vladimír Hlaváč, Ph.D.

Question to discuss:

Present a Convolutional neural network and how it can be used in the deep learning concept.