Title: Image Recognition with Deep Learning for Web Scrapped Images

Author: Ahmed Mohamed Alaa Essameldin Toubar

Supervisor: doc. Ing. Ivo Bukovský, Ph.D.

The thesis proposition was very demanding and there is not so much time in the last semester of our specialization to solve this problem. The work has been assigned on April 19, what gives up to two months to work on. But even in this situation, the student should to concentrate to get some practical experiences with the deep learning. Practically solved tasks were just a multilayer perceptron network with two hidden layers.

From the proposition, i guess the second task was to choose an environment; too much effort is done to choose a computing time provider, which was not a task.

The third task suggests that samples should vary more, than is presented on the Fig. 3-11. After some tests, student confirmed commonly known fact, that unlabeled data is abundant, when labeled is rare and expensive (at least correctly labeled).

For the 4th task, the student started to solve recognition of numbers from 1 to 9, but a result is not presented in this work. Even the 5th task i would like to proclaim unfinished (mostly summarized in the conclusion).

From the second point of view, the student starts with a theme, which is a new for us and is not taught in any of subjects in our bachelor specialization. Many visible errors should be caught by supervisor, as empty pages (even an empty chapter), different size of characters in the code examples or equation numbering, or even correct place of reference marks. The abstract should be written in a passive past tense, it characterise the work after being complete.

In complete, i would recommend this bachelor work to be defended, and i suggest a "C"-good as a classification.

In Prague, September 1, 2017

Ing. Vladimír Hlaváč, Ph.D.

Question to discuss:

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