

Posudek diplomové práce

Matematicko-fyzikální fakulta Univerzity Karlovy

Autor práce Bc. Marek Dobranský
Název práce Detekce objektů pro kamerový dohled pomocí SSD přístupu
Rok odevzdání 2019
Studijní program Informatika **Studijní obor** Umělá inteligence

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Text posudku:

Submitted thesis is dedicated to object detection in still pictures and video sequences with the means of deep learning and convolutional networks.

The overall structure of the work is excellent, starting with an introduction of the state of art models, description of specific related detectors and leading to proposals of modifications and improvement of the SSD detectors.

Student shows deep understanding of the topic and renders an interesting set of cited literature. He brings reasonable comparison of mentioned models together with an implementation of a framework for SSD detectors. He also exhibits more than comparable results of proposed temporal SSDTC concept to the renowned ResNet solution.

The main feeling from the thesis is a definitely tight cooperation with the supervisor resulting in a goal oriented structure and the studied SSD detectors added value approach.

I have not found any discrepancy that is worth mentioning. The only issue is that the text flow sometimes tends to be too fast or too brief for not much experienced reader, thus expecting either vast knowledge or calling for other sources exploration. But being it probably just a personal claim it does not change the total result of an extraordinary work I recommend for both the thesis defense and further scientific workaroud.

Práci doporučuji k obhajobě.

Práci navrhuji na zvláštní ocenění.

Pokud práci navrhuje na zvláštní ocenění (cena děkana apod.), prosím uveďte zde stručné zdůvodnění (vzniklé publikace, významnost tématu, inovativnost práce apod.).

Student showed deep understanding of the topic, presented reasonable comparison of the state of art models and implemented interesting improvements of the SSD detectors.

Datum 2.6.2019

Podpis