

Review of Master's Thesis

Student: Coufal Martin, Bc.
Title: Gaussian Processes Based Hyper-Optimization of Neural Networks (id 22368)
Reviewer: Landini Federico Nicolás, DCGM FIT BUT

1. **Assignment complexity** **more demanding assignment**
The thesis required understanding complicated enough concepts in order to implement a toolkit. Moreover, the toolkit was documented properly and it can be used by other people which were not requirements to which the student committed to.
2. **Completeness of assignment requirements** **assignment fulfilled with enhancements**
All points were accomplished and some extensions as mentioned in the previous question.
3. **Length of technical report** **in usual extent**
The ideas were covered in appropriate length.
4. **Presentation level of technical report** **95 p. (A)**
There was a good level of detail in the explanation of concepts. Enough to understand what was necessary for the work and very consistent across different parts. The presentation of experiments was straightforward.
5. **Formal aspects of technical report** **75 p. (C)**
Although the language was in general correct, there were far too many mistakes with articles in English and some in terms of contractions which are not used in formal language. Nevertheless, the register in general was correct.
6. **Literature usage** **95 p. (A)**
Cited works were relevant for the thesis.
7. **Implementation results** **95 p. (A)**
The code is available in Github and the implementation is clearly explained in the thesis. Moreover, the usage is also described and examples provided. The interface for optimizing neural networks is described so people interested in using the tool can follow the interface to plug this toolkit in their pipeline.
8. **Utilizability of results**
Since the toolkit is available, anybody can make use of it. It is also in the field of neural network (NN) optimization which is a necessary step in most machine learning tasks as NNs are nowadays widely used.
9. **Questions for defence**
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10. **Total assessment** **90 p. excellent (A)**
The work required a good amount of effort in terms of implementation and understanding concepts related to state of the art techniques. Even though there were a fair amount of mistakes in terms of redaction in English, the thesis was well structured and topics well developed.

In Brno 15 June 2020

Landini Federico Nicolás
reviewer