

Call for Bachelor Thesis

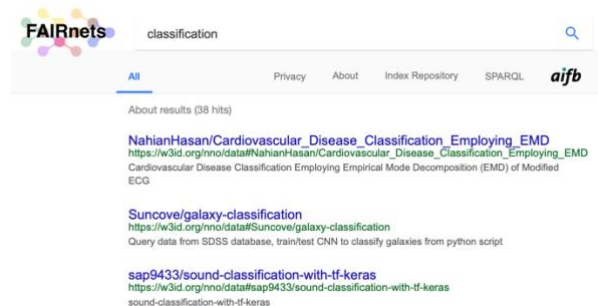
“Translating encoded neural network information to executable programming code”

(in English/German)

What is the topic?

In order to train a neural network, you typically need a huge amount of data and computing power which you may not have. The field of Transfer Learning tries to tackle this problem by re-using neural networks.

FAIRnets [1] is a search engine for neural networks developed at our institute based on FAIRnets Knowledge Graph. Its data base consists of GitHub repositories using the library Keras [2]. On top of this, we want to build a plugin to automatically execute a neural network which architecture is based on the information saved in the knowledge graph.



In this thesis, the idea is to develop a mapping to translate the encoded neural network information in executable programming code. This should be implemented into FAIRnets Search.

[1] <https://km.aifb.kit.edu/services/fairnets/>

[2] <https://keras.io>

Which prerequisites should you have?

- Interest in neural networks and machine learning
- Python can be beneficial

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