



Deep Learning Cluster Statistics Website

Project Management and Software Development
for Medical Applications

General Info

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Project Description

To utilize all of the computational resources as efficiently as possible. For that reason, many researchers use open source cluster software to centralize the computations on a server. However, with many different users including students and visiting researchers it is difficult to keep track of the current number of experiments that run on the server. In the partner project (Deep Learning Cluster Statistics Back-end) we are planning to save information in a defined way into a back-end. In this project the task is to visualize these information in a structured and user friendly manner. This website should be mobile and desktop optimized and allow for future expansions of this project.

Student's Tasks Description

The first task is to define an interface with the partner project. After this is done sample data has to be created to initially fill the back-end to start developing. The main task will be to create the front-end application website. Here the selection of the best tools and libraries is crucial.

Technical Prerequisites

- HTML, CSS, JavaScript
- Python
- REST interfaces, JSON

References

<https://jquery.com>

<https://www.chartjs.org/samples/latest/>

<https://flask.palletsprojects.com/en/1.1.x/>

<https://swagger.io/tools/swagger-ui/>

<https://blog.miguelgrinberg.com/post/the-flask-mega-tutorial-part-xx-some-javascript-magic>

Note

This project can only be offered if the partner project "Deep Learning Cluster Statistics Back-end" is selected by another student.

Please send the completed proposal to javier.esteban@tum.de, ardit.ramadani@tum.de, mf.azampour@tum.de and zl.jiang@tum.de. Please note that this proposal will be evaluated by the BMC coordinators and will be assigned to a student only in case of acceptance.