Case Challenge:

Topic Modelling with Natural Language Processing

**Title**

Topic Modelling

**Motivation and high-level task description**

As scientific output is growing exponentially, it is getting increasingly difficult to get a comprehensive overview of related work. However, acknowledging prior art poses a necessary basis for good further research. In the context of this case challenge, it will be your task to deal with this very problem and develop a support for the process of literature search using methods of machine learning. The Neuro-Information-Systems (NeuroIS) discourse will serve as a basis. The task is three-fold. Using topic modelling approaches you will work out what the focus topis of the research field are. Secondly, you will classify publications according to their type of study. Combining the results from the first two tasks, you will implement a recommendation approach to suggest new papers based on an input paper.

**Brief description of the dataset used in the process**

A pre-collected data corpus of publications within the NeuroIS discourse (titles + abstracts) will be used as the data basis.

**Brief description of the expected deliverable**

Apart from the submitted code, you should come up with an evaluation approach to assess the recommendations made.