Seminar Winterterm 2020/2021
“Commonsense Reasoning”

Prof. Dr. Steffen Staab
Dr. Nico Potyka
Teresa Krämer

First meeting: 3. November 2020, 14.00 o’clock
Room: t.b.a.
Further meetings: each Tuesday 14.00 o’clock

Target group
The seminar is aimed at students with an interest in artificial intelligence and formal knowledge representation.

The Topic
As a branch of artificial intelligence, commonsense reasoning, is concerned with the simulation of the human ability to handle problems in everyday life situations. These problems are characterized by ambiguity and uncertainty and typically require large amounts of background knowledge. Humans naturally reason in the presence of incomplete and inconsistent knowledge, are able to reason in the presence of norms as well as conflicting norms and are able to quickly reconsider their conclusions when being confronted with additional information. The versatility of human reasoning illustrates that any attempt to model the way humans perform commonsense reasoning has to use a combination of many different techniques.

In this seminar we will discuss recent topics from the area of commonsense reasoning based on relevant research papers. We will become acquainted with different benchmarks in this area together with methods to tackle them.

Procedure
The seminar will be held in English, and will consist of individual talks of students which will be given in the weekly seminar meetings. Each student will research and prepare one topic in the area of commonsense reasoning, give a presentation (20 minutes) about the topic, and write a report (about 12 pages) about it. After the presentations and before the end of the winter semester, the seminar reports must be submitted.