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Title: **Reasoning in KR-formalisms.**

My research topic is reasoning in various formalisms within the context of Knowledge representation and the semantic web. The main focus is on a comparison of three formal logics as to their ability to reason about knowledge stated in formal ontology's. The three formalisms are the modal system K, the multimodal system Kn and the system ALC (a description logic).

The Data that are used in the reasoning tasks is extracted and formalized from a Danish electronics company (Servodan A/S). The data is structured as a set of formal definitions in the form of a description logical T-box.

The formal reasoning method I use is that of Analytic Tableaux'. This method was developed by logicians such as Beth, Kripke, Smullyan among others.