The Early Years of Automated Reasoning: The Logic Theory Machine.

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Abstract

In the 65th anniversary of the Logic Theory Machine (LTM), we pay homage to the early contributors of automated reasoning, by looking at some historical and technical aspects that laid the foundations of the field. The LTM, which is based on a Hilbert-style calculus for classical logic, was proposed and implemented by Newell and Simon in 1956, with subsequent improvements in the next few years. Despite the technical challenges, mostly imposed by the limited existing architectures at that time, and some methodological criticism, which we also intend to discuss, their approach has established some techniques and heuristics that have survived time and that are still in use today.

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