Resources limited agents

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0.1 Context

0.2 Learned in this study

0.3 Things to explore

1 Overview

1.1 What are the impacts of limited computational time and memory space?

Limitations of time and space due to the available resources implies that an agent will need to develop methods to make the most effective use of those two resources. Furthermore, he may be able to exchange time for space and vice-versa.

A space limited agent may have no choice other than to drop existing knowledge to have some space available in order to do its current computation. The way existing knowledge may be dropped will depend on the strategy used by the agent and can be referred as knowledge prioritization. Short term may be prioritized over long term (or the opposite). A current computation may decide to abort due to resource exhaustion instead of dropping existing knowledge (knowledge preservation).

A time limited agent may need to make use of more rough/imprecise methods in order to rapidly provide a result.

2 See also

3 References