The theory of Real Intelligent Agent

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Abstract

Agent-orientation has been regarded as a promising approach to meet challenges for developing more and more complicated software to operate in open and dynamic environments. The traditional agent based modeling (ABM) focuses on "knowledge structures", that model aspects of their domain of expertise. An agent's choice of action at any given instant depend on the entire percept sequence observed to date. Despite of the successfulness of this approach of ABM in some applications, the agents are unable to adapt unstructured changing environments, unable to produce intelligent behavior.And, "Reliable-Intelligent-Autonomous Machine" is still a dream. In this paper, to design adaptive autonomous agent we presenting a new architecture inspired by the real intelligence of human, Prediction. Instant prediction in every moment is the unique form of intelligence in human. Prediction is an ability of anticipation of future states and possibilities, based on diverse form of agent's goal, often significantly alters the aggregate behavior of the system of which an agent is part. Prediction ables to use their experience to continually improve their ability to deal with shifting goals and motivations in a fixed and time-dependent manner. They become completely autonomous and do not need to obey instructions issued by a God-like oracle. The several architectures of agents present here with their new sense of ability. The end of paper presents how we tending to develop a standard theory for the agents, to design intelligent machines in coming future.