

From Steve Austin to Peter Norvig : Engineering AMEE, the Simple Autonomous Agent

Contents

Abstract

From Steve Austin to Peter Norvig : Engineering AMEE, the Simple Autonomous Agent

"We can build it. We have the technology." — Oscar Goldman from The Six Million Dollar Man, 1974

Creating and maintaining a simple autonomous agent involves building an application that can successfully deal with Russell & Norvig's (1995) four elements of intelligent agents: *Precepts*, *Actions*, *Goals*, and *Environment*. Taking a lead from the 1970s US television series "Six Million Dollar Man" we'll explore the details of designing and building **AMEE** the *Agent for Maze Environment Exploration*. Along the way we'll see how you can use existing web technologies such as hypermedia, semantic profiles, and a compact algorithm to build a small Javascript-based autonomous agent that can successfully navigate random two-dimensional mazes of arbitrary size. Finally, we'll contemplate how we can apply what we learned in this example to the larger World Wide Web to create more useful and more sophisticated autonomous agents using existing tools and technologies.
