
GIS Applications Using Agent Technology

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Abstract

There is an increasing interest in agent-oriented technology, spanning applications as diverse as information retrieval, user interface design and network management. Application of intelligent agents in the GIS environment is actively being explored. Many different types of agents are being employed to improve usability of GIS software as well as users access to geospatial data and services available through Internet. Geospatial information retrieval and filter, intelligent geospatial search engine, knowledge discovery, decision model assessment and optimization are typical applications based on agents.

This paper presents a short introduction to agent and the main research areas in agent technology. The heart of the paper is an overview of applications of intelligent agents in GIS. These applications have been classified in different categories. The paper concludes with an example of a web search tool, Special Spatial Search (3S), to showcase the uses of agent technology. 3S is developed to assist users in geospatial related searching over the web.
