

A New Approach of the Collaborative User Interface Agents

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Abstract

Next generation of information systems will rely on cooperative intelligent agents for playing a fundamental role in actively searching and finding relevant information on behalf of their users in complex and open environments, such as the Internet. User Interface Agents (UIA) are semi-intelligent systems, which help the users to access, manage share and exchange information. Recently, various researchers have proposed a learning approach towards building such agents and some working prototypes have been demonstrated. Such agents learn by watching over the shoulder of the user and detect patterns and regularities in the user's behavior. We present a new approach of the collaborative UIA that helps the user to retrieve information that is consistent to the user's need. The model provides tools and utilities for the user to manage his/her information repositories with dynamic organization and adaptation views. In order to investigate the performance of the UIA, we carried out several experiments. Through the experiments, the results ensure that the techniques of personalization, clustering the user's preferences, and making use of the preferences promise to achieve more relevant information to the user's queries.