ENGINEERING AGENT-BASED SOFTWARE SYSTEMS*

PANEL DISCUSSION

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Building software systems with using modules has been a popular trend. The concept of the 'module' has changed from a subroutine, to object, to component (DCOM, JavaBean) and now to an 'agent'. Various definitions of the agent have been used over the past few years. In general, a software agent is a component that can exhibit both proactive and reactive behaviors. It works in an autonomous mode and possibly has a capability to learn to improve its performance. Several agent-based systems have been built. Several methodologies and tools exist to aid the development of such systems. Several conferences dealing with the software engineering of agent-based systems have been held. But, the software engineering aspects seem to have taken a back seat, although some recent efforts have addressed this issue. The panel will concentrate on looking at the state-of-the-art in software engineering of agent-based systems and the directions needed. The panel will also address the issues involved in teaching this paradigm in computer science curricula. In particular, we will address the question: Do we need to do anything different in software engineering courses to accommodate this paradigm?

There will be an opening remark from each panelist introducing the concepts and issues to be considered for discussion, followed by discussion based on the questions from the audience.