Letter from the Guest Editors

Agent technology has emerged over the last decade as a new computing paradigm, but only recently has it become more central to software development. Lately, the Agent-oriented Software Engineering research area has established itself as a prominent discipline of computing. Agents have been applied to a wide range of applications that address issues such as knowledge representation and reasoning, communication, coordination, cooperation among heterogeneous and autonomous parties, perception, commitments and goals.

Research into Agent-oriented Software Engineering is mounting steadily, as demonstrated by the increase in conferences and journals promoting the field. The premier scientific conference for research in this area is the International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS). Among the available journals are the Autonomous Agents and Multi-Agent Systems International Journal (JAAMAS) and the International Journal on Agent-Oriented Software Engineering (IJAOSE).

This Special Issue is focused on software engineering techniques for developing Agent-oriented Systems. The result is a peer-reviewed quality issue in which research results achieved by the Brazilian scientific community pertinent to Agent-oriented Software Engineering are published for wide dissemination.

The issue consists of four refereed articles. Fifteen papers were submitted and we sought to maintain strict balance between the types of papers, favoring the most prominent issues in the field of Agent-oriented Software Engineering. The papers address the use of agents and ontologies for developing semantic web applications, the problem of governing multi-agent systems and specifying flexible interaction laws as well as the modeling, designing and implementing of agent roles.

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