1. Record Nr. UNISA996465505703316

Titolo	Software engineering for multi-agent systems V : research issues and practical applications / / Ricardo Choren [and five others] editors
Pubbl/distr/stampa	Berlin ; ; New York : , : Springer, , [2007] ©2007
ISBN	3-540-73131-8
Edizione	[1st ed. 2007.]
Descrizione fisica	1 online resource (XII, 236 p.)
Collana	Lecture notes in computer science. State-of-the-art survey ; ; 4408
Disciplina	006.3
Soggetti	Software engineering Intelligent agents (Computer software)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Some of the papers were initially presented at the 5th International Workshop on Software Engineering for Large-Scale Multi-Agent Systems, SELMAS 2006, held in Shanghai, China in May 2006"--Page [4] of cover.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Fault Tolerance -- On Fault Tolerance in Law-Governed Multi-agent Systems -- On Developing Open Mobile Fault Tolerant Agent Systems -- Exception Handling and Diagnosis -- Challenges for Exception Handling in Multi-Agent Systems -- Exception Handling in Context-Aware Agent Systems: A Case Study -- Exception Diagnosis Architecture for Open Multi-Agent Systems -- Security and Trust -- SMASH: Modular Security for Mobile Agents -- Reasoning About Willingness in Networks of Agents -- Verification and Validation -- Towards Compliance of Agents in Open Multi-agent Systems -- Towards an Ontological Account of Agent-Oriented Goals -- Early Development Phases and Software Reuse -- Improving Multi-Agent Architectural Design -- Objects as Actors Assuming Roles in the Environment -- A Framework for Situated Multiagent Systems.
Sommario/riassunto	Software is present in every aspect of our lives, pushing us inevitably towards a world of distributed computing systems. Agent concepts hold great promise for responding to the new realities of large-scale distributed systems. Multi-agent systems (MASs) and their underlying theories provide a more natural support for ensuring important agent properties, such as autonomy, environment heterogeneity, organization

and openness. Nevertheless, a software agent is an inherently more complex abstraction, posing new challenges to software engineering. Without adequate development te- niques and methods, MASs will not be sufficiently dependable, thus making their wide adoption by the industry more difficult. The dependability of a computing system is its ability to deliver a service that can be justifiably trusted. It is a singular time for dependable distributed systems, since the traditional models we use to express the relationships between a computational process and its environment are changing from the standard deterministic types into ones that are more distributed and dynamic. This served as a guiding principle for planning the Software Engineering for Large-Scale Multi-Agent Systems (SELMAS 2006) workshop, starting with selecting the theme, “building dependable multi-agent systems.” It acknowledges our belief in the increasingly vital role dependability plays as an essential element of MAS development.