1. Record Nr. UNISA996466169603316

Titolo	Agent-Oriented Software Engineering IV [[electronic resource]] : 4th International Workshop, AOSE 2003, Melbourne, Australia, July 15, 2003, Revised Papers / / edited by Paolo Giorgini, Jörg Müller, James Odell
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2004
ISBN	1-280-30670-X 9786610306701 3-540-24620-7
Edizione	[1st ed. 2004.]
Descrizione fisica	1 online resource (x, 245 p.) : ill. ;
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2935
Disciplina	005.1
Soggetti	Software engineering Computer programming Programming languages (Electronic computers) Computer logic Artificial intelligence Software Engineering/Programming and Operating Systems Software Engineering Programming Techniques Programming Languages, Compilers, Interpreters Logics and Meanings of Programs Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Held as part of the 2nd International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2003) in Melbourne, July 2003.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Modeling Agents and Multiagent Systems -- Using UML in the Context of Agent-Oriented Software Engineering: State of the Art -- Towards a Recursive Agent Oriented Methodology for Large-Scale MAS -- Agent-Oriented Modeling by Interleaving Formal and Informal Specification -- The ROADMAP Meta-model for Intelligent Adaptive Multi-agent Systems in Open Environments -- Modeling Deployment and Mobility

Issues in Multiagent Systems Using AUML -- Methodologies and Tools -- A Knowledge-Based Methodology for Designing Reliable Multi-agent Systems -- A Framework for Constructing Multi-agent Applications and Training Intelligent Agents -- Activity Theory for the Analysis and Design of Multi-agent Systems -- A Design Taxonomy of Multi-agent Interactions -- Automatic Derivation of Agent Interaction Model from Generic Interaction Protocols -- Patterns, Architectures, and Reuse -- Building Blocks for Agent Design -- Supporting FIPA Interoperability for Legacy Multi-agent Systems -- Dynamic Multi-agent Architecture Using Conversational Role Delegation -- Roles and Organizations -- Temporal Aspects of Dynamic Role Assignment -- From Agents to Organizations: An Organizational View of Multi-agent Systems -- Modelling Multi-agent Systems with Soft Genes, Roles, and Agents.

Sommario/riassunto

The explosive growth of application areas such as electronic commerce, ent- prise resource planning and mobile computing has profoundly and irreversibly changed our views on software systems. Nowadays, software is to be based on open architectures that continuously change and evolve to accommodate new components and meet new requirements. Software must also operate on di- rent platforms, without recompilation, and with minimal assumptions about its operating environment and its users. Furthermore, software must be robust and autonomous, capable of serving a naive user with a minimum of overhead and interference. Agent concepts hold great promise for responding to the new realities of so- ware systems. They o?er higher-level abstractions and mechanisms that address issues such as knowledge representation and reasoning, communication, coor- nation, cooperation among heterogeneous and autonomous parties, perception, commitments, goals, beliefs, and intentions, all of which need conceptual mo- ling. On the one hand, the concrete implementation of these concepts can lead to advanced functionalities, e.g., in inference-based query answering, transaction control, adaptive work?ows, brokering and integration of disparate information sources, and automated communication processes. On the other hand, their rich representational capabilities allow more faithful and ?exible treatments of c- plex organizational processes, leading to more e?ective requirements analysis and architectural/detailed design.