Record Nr. UNISA996466054503316 Agent-Oriented Software Engineering V [[electronic resource]]: 5th **Titolo** International Workshop, AOSE 2004, New York, NY, USA, July 2004. Revised Selected Papers / / edited by James Odell, Paolo Giorgini, Jörg, P. Müller Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2005 **ISBN** 3-540-30578-5 Edizione [1st ed. 2005.] Descrizione fisica 1 online resource (X, 246 p.) Programming and Software Engineering;; 3382 Collana Disciplina 005.1 Soggetti Software engineering Artificial intelligence Computer logic Computer programming Computer communication systems Software Engineering/Programming and Operating Systems Software Engineering Artificial Intelligence Logics and Meanings of Programs **Programming Techniques** Computer Communication Networks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Modeling -- Organizational and Social Concepts in Agent Oriented Software Engineering -- Representing Agent Interaction Protocols with Agent UML -- AML: Agent Modeling Language Toward Industry-Grade Agent-Based Modeling -- Formal Semantics for AUML Agent Interaction Protocol Diagrams -- A Study of Some Multi-agent Meta-models -- A Metamodel for Agents, Roles, and Groups -- Design -- Bridging the Gap Between Agent-Oriented Design and Implementation Using MDA -- A Design Process for Adaptive Behavior of Situated Agents --Evaluation of Agent-Oriented Software Methodologies - Examination of

the Gap Between Modeling and Platform -- A Formal Approach to

Design and Reuse Agent and Multiagent Models -- An Agent Construction Model for Ubiquitous Computing Devices -- Reuse and Platforms -- A Framework for Patterns in Gaia: A Case-Study with Organisations -- Enacting and Deacting Roles in Agent Programming -- A Platform for Agent Behavior Design and Multi Agent Orchestration -- A Formal Reuse-Based Approach for Interactively Designing Organizations.

Sommario/riassunto

The explosive growth of application areas such as electronic commerce. enterprise 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 different 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 software systems. They offer higher-level abstractions and mechanisms which address issues such as knowledge representation and reasoning, communication, coordination, cooperation among heterogeneous and autonomous parties, perception, commitments, goals, beliefs, and intentions, all of which need conceptual modelling. On the one hand, the concrete implementation of these concepts can lead to advanced functionalities, e.g., in inference-based query answering, tra- action control, adaptive workflows, brokering and integration of disparate information sources, and automated communication processes. On the other hand, their rich representational capabilities allow more faithful and flexible treatments of complex organizational processes, leading to more effective requirements analysis and architectural/detailed design.