Record Nr. UNISA996466234103316 Declarative Agent Languages and Technologies [[electronic resource]]: **Titolo** First International Workshop, DALT 2003, Melbourne, Australia, July 15. 2003, Revised Selected and Invited Papers // edited by Joao Leite, Andrea Omicini, Leon Sterling, Paolo Torroni Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2004 **ISBN** 1-280-30774-9 9786610307746 3-540-25932-5 Edizione [1st ed. 2004.] 1 online resource (X, 272 p.) Descrizione fisica Collana Lecture Notes in Artificial Intelligence;; 2990 005.2 Disciplina Soggetti Software engineering Artificial intelligence Computer communication systems Programming languages (Electronic computers) Software Engineering/Programming and Operating Systems Artificial Intelligence Software Engineering Computer Communication Networks Programming Languages, Compilers, Interpreters Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto MAS as Complex Systems: A View on the Role of Declarative Approaches -- A Logic-Based Infrastructure for Reconfiguring Applications -- Operational Semantics for Agents by Iterated Refinement -- Go! for Multi-threaded Deliberative Agents -- An Agent-Based Domain Specific Framework for Rapid Prototyping of Applications in Evolutionary Biology -- A Logic for Ignorance -- Coo-BDI: Extending the BDI Model with Cooperativity -- Extending the Operational Semantics of a BDI Agent-Oriented Programming Language for Introducing Speech-Act Based Communication -- A Combined Logic of

Expectation and Observation -- A Proposal for Reasoning in Agents: Restricted Entailment -- A Social Approach to Communication in Multiagent Systems -- Logic-Based Electronic Institutions -- Modeling Interactions Using Social Integrity Constraints: A Resource Sharing Case Study -- Linear Logic, Partial Deduction and Cooperative Problem Solving.

Sommario/riassunto

Agent metaphors and technologies are increasingly adopted to harness and g- ernthecomplexityoftoday's systems. As a consequence, the growing complexity of agent systems calls for models and technologies that promote system p- dictability and enable feature discovery and veri? cation. Formal methods and declarative technologies have recently attracted a growing interest as a means to address such issues. The aim of the DALT 2003 workshop was two-fold. On the one hand, we wanted to foster a discussion forum to export such techniques into the broader

communityofagentresearchersandpractitioners. On the other hand. wewanted to bring in the issues of real-world, complex, and possibly large-scale agent s- tem design in the perspective of formal methods and declarative technologies. Thanks to the very high quality of our program committee, we managed to put together a rich program, including three technical sessions and two panel sessions: The Use of Declarative Programming for Agent-Oriented Software Enneering, moderated by Leon Sterling and Andrea Omicini, and Declarative and Logic-Based Technology for Agent Reasoning and Interactions, organized and moderated by Rafael Bordini and Wiebe van der Hoek, with the participation of ?ve invited panelists. This bookcontainstherevisedandextendedversionsofthe paperspresented at the workshop, as well as three invited contributions by leading researchers of the ?eld. It is composed of three parts: (i) software engineering and multi-agent system prototyping, (ii) agent reasoning, BDI logics and extensions, and (iii) social aspects of multi-agent systems.